THE NATURE OF WAYFINDING IN THE CITY: WAIKĪKĪ

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Submitted towards fulfillment of the requirements
for the Doctor of Architecture degree

Doctorate Project Committee
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We certify that we have read this Doctorate Project and that, in our opinion, it is satisfactory in scope and quality in partial fulfillment for the degree of Doctor of Architecture in the School of Architecture, University of Hawai'i at Mānoa.

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The community at the School of Architecture contributes to the development, research, and discovery of multiple points of interest within this thesis and many others. Points of purpose and goal were embedded in this landscape, which I traversed, while manifesting spaces of enrichment and wonder along the way.

The committee member's comments, suggestions, and criticisms were critical in the development of this doctoral thesis. A response and result of clear communication, a back and forth of ideas and concepts, which helped me to create an artifact of value. I feel privileged to have been part of this creative endeavor; it helped guide me to a destination of intellectual enrichment. Further, the committee gave me the conceptual tool kit to find, encounter, and discover points of interest within this study and beyond.

My family helps me along the way and gives me guidance. My mother, for instance, sees the strategic points in situations and helps to direct a way. My father likes to be in the moment or encountering situations, which helps me to see the discovery and journey. Extending this, my brother threads ideas and expectations into my everyday, which orients my trajectory and traversal towards points of interest. Indeed, all three individuals contribute as a whole, affording me the ability to traverse life's terrain, and find points of value and accomplishment within.

ABSTRACT

FOCUS, METHODOLOGY, GOALS, THEORY

focus

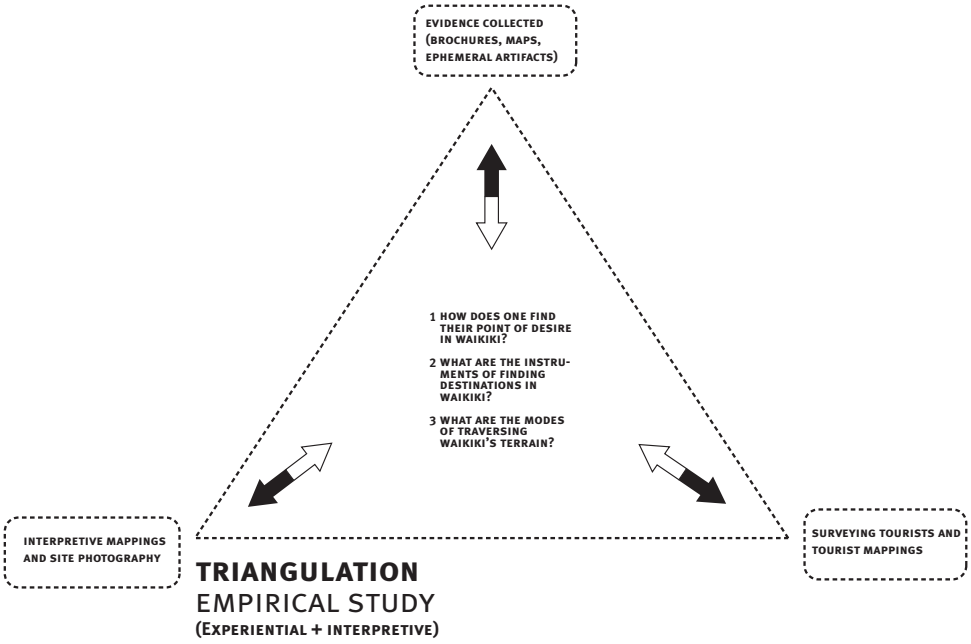
The focus of this study on the nature of wayfinding may reveal multiple unknown points in the terrain one traverses. This thesis entails a quasi-objective approach that enables a creative way of analyzing, synthesizing, and discovering these points of unknown desire and destination. For example, surveying the tourists and travelers to Waikiki may reveal the multiplicity of points that embed themselves in the urban landscape. Yet, these spatial points reveal themselves through the act of traversing, finding, discovering, and encountering along the way. In addition, the study reveals the spatial matrix in which points of desire and destination manifest for the visitor, a multiplicity of points with instances of departure and arrival.

The visitor demographic can be a "lens" from which to understand how one uses wayfinding tools and finds their points of desire in the terrain. For instance, how do we as tourists and travelers find our way? Also, how do we traverse toward a given destination? Indeed, most travelers and tourists are using visual, auditory, and tactile cues to find their way. Yet, do these spatial signifiers of meaning help them find their destination or are they getting them lost? Focusing on Waikiki as a destination and site for this study will give insight into the phenomena of wayfinding, which influences the perception of the user while traversing a given terrain within a spatial matrix of desire.

methodology

The strategies and tactics that I will employ will be a combination of empirical and quasi-objective approaches, such as collecting evidence, taking photos, surveying tourists and travelers, and creating experiential maps from the site. This is my way of studying wayfinding, from the

A



GRAPHIC A: TRIANGULATION OF COLLECTED EVIDENCE

totally rigorous and scientific, to the subjective of scope. This will attempt to synthesize an understanding of how one wayfinds in urban environments with multiple points of destination. For example, in **figure A**, this method entails triangulating the surveys of the travelers and tourists, collecting evidence, such as maps and brochures, and creating interpretive mappings of Waikiki, to reveal and represent the spatial matrix of points as it relates to wayfinding. These tactics will help create experiential mappings, which can uncover information about the terrain of Waikiki that is unknown to travelers and tourists, advancing the notion that the urban terrain is multiple in response to the user's ability to traverse, find, and encounter spatial points of desire and destination.

goals

One of the goals of this study will be to understand how one finds their way in dense urban environments, such as cities by using a variety of visual, tactile, and auditory signs. These signs come from the built and natural landscape as well as digital mobile devices of wayfinding. Yet, another goal would be to investigate the spatial matrix that embeds points of destination and desire for the visitors to experience and discover. For example, Waikiki is a destination for many travelers and tourists, thus manifesting points of desire, which are explicit, implicit, impulsive, and interstitial. The visitors traverse a spatial matrix of points, which is multiple and forms a network of pathways and nodal interactions. Indeed, maps and brochures afford the traveler and tourist the ability to traverse the terrain and find their destination or point of desire. Thus, allowing for spontaneity and discovery to manifest within the terrain, where one traverses and encounters spatial points, along the way, creating meaningful instances in space and time.

theory

These dense urban terrains create a need for wayfinding to occur because they contain spatial matrices of destination and desire. A complex system of built form and semantics is embedded in the DNA of the urban plan. Most urban spaces interconnect to each other and weave a network of circulation towards multiple points of desire. Each point can inform the experience and memory of the traveler or tourist while traversing, which influences how they map and perceive their terrain. This densification of the urban environment curtails users perception while traversing the terrain at different velocities, influencing the way these points of destination are found, made, and forgotten. Moreover, these systems of human movement along pedestrian and vehicular pathways, in the urban framework, create multiple spatial matrices of desirable points that layer within trajectories in the terrain.

II

INTRODUCTION

THE NATURE OF WAYFINDING IN THE CITY: WAIKĪKĪ

II INTRODUCTION

In order to have a firm conceptual basis of wayfinding there needs to be a historical understanding, through the tracking of different modes in wayfinding from the first known account of this awareness to contemporary notions. These modes of perception and movement need to be addressed from their earliest conception, from the labyrinths of Greek mythology to the digital interfaces that inhabit user's internal and external surroundings. Navigation of the seas by the indigenous people of Hawaii to the situationists in mapping the city as an intuitive experiment of discovery and encounter, the significance of cartography will be a topic that will be investigated and seen through the evidence of brochures, surveys, and maps collected in Waikiki to further the investigation of how the tourist or traveler finds their point of desire in the spatial matrix.

The system of wayfinding can be analyzed by means of a qualitative approach on a micro scale in the city's context by observation and a systematic approach. This entails photographing and mapping the everyday movements of the visitors. The user's ability to traverse the urban fabric of the city with the tools of wayfinding as well as the physical cues that inform one's experience is crucial. These modes of traversing can be virtual, visceral, tactile or phenomenological that influences the user's experience of the spaces. Yet, on the macro scale, the city's system of find-ability can be analyzed through a qualitative lens, allowing the comparative study of multiple cities to see the dynamics and interfaces that orient the user. Nevertheless, the user engages the 'instances' or points along the way, in order, to get where they want to be.

The notion of finding in the city context is a crucial aspect in which people have to address on a daily basis. Humans already have an inherent ability to direct themselves through space with their movement and intuition; this makes us spatial beings that are intertwined within our surroundings. We rely on so many visual cues from the environment in which we find ourselves, for the orientation towards a specific destination or goal. Indeed, there are many ways to access information for finding purposes through these mediums; digital interfaces are expanding the ways of communication, even through physical interfaces of the city. These interfaces allow the user many options but at the same time can be disorienting and anxiety filled; for instance, if one is unaware of the technology and its applications for the user's ability to navigate the terrain.

The spaces humans inhabit are being transformed by technology and the ways in which we interact physically and digitally in the urban context. This study of wayfinding's role in the context of the urban landscape allows one to understand how and why it is changing the ways in which users inhabit space, or how they see themselves traversing to specific points or destinations, either through mechanical means, such as trains, buses, automobile, and helicopter or bodily means of travel, such as walking and riding a bicycle. Each mode of traversing enables the user in the urban fabric a way of finding destinations and points of interest, even while using

a digital interface or a signage system in the landscape. These ways of mapping allow and aid the user in finding what he or she is searching for in the city. These means are evolving and transforming; that is, global positioning as well as hand-held devices implementing these tasks is influencing these modes of travel. Indeed, the city's relationship to the user is becoming more complex and threaded through our daily routines with technology and human intervention being the source.

Why is Waikiki a unique place for investigating wayfinding? For example, the wayfinding and the mechanisms that attribute to Waikiki's navigation comes from the physical act of wandering and surveying the urban landscape while using physical and digital maps or signs to find the way. Waikiki has the highest concentration of wayfinding use on Oahu and it is one of the densest with humans on the planet per square foot. The visitors and travelers participate in this wandering in order to discover and find points of interests while traversing an unfamiliar terrain. Encounters are part of the wayfinding experience in Waikiki because the visitors anticipate that the itinerary is already mapped out. This mapping allows for these encounters to appear as part of the plan but actually it can also be traumatic because one can become disoriented and lost.

What are the tools of wayfinding in cities? The instruments and mechanisms for finding one's way in resort destinations, such as Waikiki depend on the user's experience, perception, and human sensibility. Interpretations of the urban terrain depend on the destination and the intention of the tourist or traveler. There are many visual cues that guide the visitor to their specific destination and point in which they can "pause"[1] and experience the identity of place. Yet, these places are already mapped out for the visitor in Waikiki because it is a "tropical resort destination"[2], which accommodates and creates a fantasy; indeed, giving the visitor, at some degree, a false sense of security, but simultaneously giving them a framework that creates a spatial experience for the visitor. These ephemeral maps can be found, which allow them to discover a sense of 'place' internally and externally of site.

1 Yi-Fu Tuan, *Space And Place: The Perspective Of Experience* (Minneapolis: University Of Minnesota Press, 1977), 6.
2 *Waikiki Special District Design Guidelines* (Honolulu, Hawaii: Dept. Of Land Utilization, 1996), 3.

01
CHAPTER
WHAT IS WAYFINDING?

CHAPTER 01: WHAT IS WAYFINDING?

The act of wayfinding is a procedure that requires the body to move through space towards multiple points of desire and destination. These points create different conditions, which the tourist and traveler encounters and discovers, a terrain of complex spatial interaction. Affording the participant the ability to traverse a given terrain with the aid of signs and maps. Most itineraries give direction and destination to a site, i.e. maps, signs, and digital devices for traversing a spatial matrix of points. Sometimes, these points of desire are not always explicit, but unknown and impulsive in nature for the traveler or tourist experience. Indeed, finding your way is sometimes difficult and obscure, however, with the right wayfinding tools for traversal–either bodily or mechanically, one can typically find their chosen point of desire and destination while still discovering and encountering along the way.

1.1 WAYFINDING AS MEANING

One can only imagine the amount of information that connects to this concept of finding ones way in the built landscape; nevertheless, it is important to understand because it involves finding your destination and reaching goals, which may lead to discovery that informs the experiences of place. There are many modes in which someone traverses the landscape; such as, on foot or mechanical means of movement, yet everything in the built and natural landscape can influence and communicate a distinct place of being that one internalizes and translates for better legibility. This internalization and decoding of environmental cues are what can trigger the bodily movement of the user as they traverse the terrain of the urban condition. Indeed, wayfinding intertwines the space of the users movement and the place or "pause"[3], which serve as points of destination and experiential moments. These points of departure allow one to set a course and direction to a specific goal and destination. For example, visual cues aid in this destination finding, such as landmarks that create a stop in space while influencing users trajectories in movement and direction.

way \wa
a. a thoroughfare for travel
b. transportation from place to place
c. movement or progress along a course
d. direction (ex. is coming this way)
e. manner or method of doing or happening
f. a possible decision, action, or outcome

How does one find their way? Does the way come before the choice of destination or after? Is it a process of analyzing one's surroundings for more information and then choosing a direction to traverse? If so, then does "way" refer to a path that the user takes in a given trajectory while trying to find a point of interest, with the help of environmental cues? These trajectories can take the form of a unicursal or a multicursal layout; they can have many options on how one traverses the terrain in order to reach a destination. **(figures 1-1, 1-2)** Of course, you need a destination to set a path of departure because without it you would be lost or way-losing in order to encounter and discover new places. The walker of the urban terrain is a user of signs, which create meaning that allows

3 Yi-Fu Tuan, *Space And Place: The Perspective Of Experience* (Minneapolis: University Of Minnesota Press, 1977), 6.

them to traverse and find what they want in a given context.

find v. \find
a. to come upon often accidentally (ex. encounter)
b. to come upon by searching or effort
c. to discover by study or experiment
e. to discover by the intellect or the feelings (ex. experience)
f. to perceive (oneself) to be in a certain place or condition
g. to bring (oneself) to a realization of one's proper sphere of activity

How does a city inhabitant find what they are looking for? This usually requires the participant doing some sort of research either on the specific object of desire or place of destination. A possible outcome from this is discovery and encounter that may lead to unknown experiences, unattainable any other way. The point of finding something is a process of searching within a system of trial and error, that is, an internal narrative that allows for the shaping of memory and experience.

The ultimate direction of this proposed research is to understand how wayfinding affects notions of place making for the user of urban form. For example, the visual spatial cues of the urban environment need to be understood in the context of the city and the users experience in regard to orientation and memory. These notions of how one orients one's body in a given environment changes the ways in which one experiences and interacts with a space. This sense of orientation or wayfinding is having influence on the communication of the built landscape within a city, and influences the users cognitive ability of mapping the landscape. Our contributing role as users and designers of the urban environment influences one's wayfinding ability in space, such as the spatial cues, signs and tactile forms.

1.2 ORIGINS OF WAYFINDING

Human existence is interwoven with its surroundings. As spatial beings we traverse and create meaning out of the space we occupy. This information about the environment helps us as users of the urban fabric for purposeful movement towards a chosen destination. Wayfinding allows for this trajectory even if it gets you lost and you find yourself way-losing. For instance, in mazes, which are made up of twists, turns, blind alleys, and dead ends, one can easily become lost and disoriented.[4] A unicursal labyrinth tends to have one defined path, which the user takes to its center, and back out again. **(figure 1-1)** The multicursal maze has many paths the user can take but more likely to get one lost, rather then finding the destination or point of desire. **(figure 1-2)**

Labyrinths are 3,500 years old and an ancient symbol of religion and mythology from diverse cultures, such as India, Sumatra, Egypt, Peru, Arizona, Iceland, and Peru.[5] This patterning combines the imagery of a circle and a spiral to create a meandering with a purposeful intent of direction, a symbol of a journey one takes through life. One of the most popular labyrinths was designed by the architect Daedalus to entomb the Minotaur and its victims. With the help of Ariadne's thread, Theseus was able to escape after defeating the monster in the center of the labyrinth.

4 Peter Morville, *Ambient Findability* (Sebastopol, CA: O'Reilly, 2005), 16.
5 Ibid.,16.

Today, sprawls and cities are similar to the labyrinths of Crete to some degree because they allow one to test their skills of finding their way to a destination. This urban construct affords the user the ability to traverse and discover unknown points along the way.

The fascination of labyrinths and mazes tends to come from a "primal fear"[6] of becoming lost and disoriented. Over the course of human history the ability to go out into the environment in search of basic needs for survival and companionship and then finding one's way back again has been a dangerous journey. The abilities of wayfinding are evolving and becoming more interconnected with the tools and technologies that shape the urban spaces one inhabits and traverses.

The **origins of wayfinding** were first observed in the context of the built environment that humans inhabit on a ritual basis. First coined by architect Kevin Lynch in 1960, a landmark book about urban spaces, *"The Image of the City"*. The term "wayfinding"[7] relates to creating a mental image of ones surroundings by observing and navigating the terrain. This mental image or "imageability"[8] of the built condition is what allows a user to find their destination without getting lost. Lynch also saw wayfinding as an aid for finding places and points of interest for the user. These instruments of wayfinding took the form of maps, street names, street numbers, and

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1-2

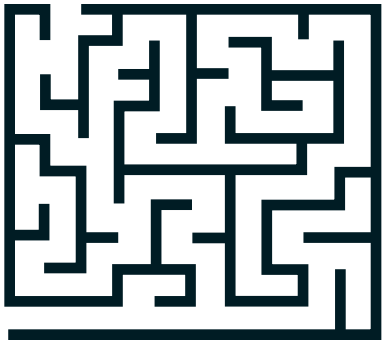


FIGURE 1-1: LABYRINTH SYMBOL (UNICURSIAL)
FIGURE 1-2: MAZE (MULTICURSIAL)

6 Ibid.,16.
7 Peter Morville, *Ambient Findability* (Sebastopol, CA: O'Reilly, 2005), 27.
8 Kevin Lynch, *The Image Of The City* (Cambridge, Mass. : Technology Press, 1960), 46.

directional signs, used primarily in urban settings that people inhabit.

The sense of well-being and balance the wayfinder encounters when traversing the terrain, is only obtained if they know where they are going. Lynch describes this as "legibility of the city". The user, for a sense of orientation, could recognize these spatial patterns in the city's fabric for orientational cues. Lynch created a vocabulary that describes the parts of the city as elements that connect to each other in multiple and complex ways. Each element is part of a whole that interacts and allows the user to navigate and traverse its pathways in the landscape. Indeed, his discoveries lead the way for the contemporary wayfinding design.

elements of the city

paths

The movement of people through streets, walkways, transit lines, canals, railroads, and any other path or channel of circulation, creates a wayfinding system. [9] **(figures 1-3, 1-5, 1-6, 1-07)**

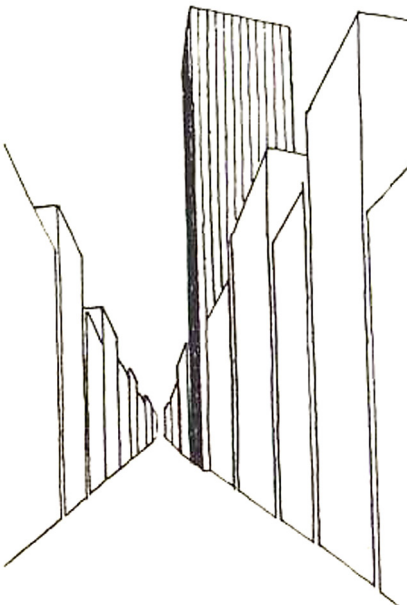
edges

A linear break creates and separates two distinct regions by walls, shores, fences, barriers, and any other boundary that divides two parts. [10] **(figure 1-5)**

districts

Parts of the city that have an identifiable character such as a financial district, a business district, or a Chinatown, create an identity of region with divisions. [11]

1-3



1-4

FIGURE 1-3
KEVIN LYNCH: *THE IMAGE OF THE CITY* (PATH, LANDMARK)
FIGURE 1-4
KEVIN LYNCH: *THE IMAGE OF THE CITY* (LANDMARKS)

9 Peter Morville, *Ambient Findability* (Sebastopol, CA: O'Reilly), 2005, 27.
10 Ibid., 27.
11 Ibid., 27.

nodes

Spatial nodes are spaces that serve as points of reference, transition and destination, such as, intersections, enclosed squares, street corners, subway stations and transportation hubs.[12] Also, where paths converge and cross, creates these nodal points of arrival and departure.

landmarks

These spatial reference points or landmarks take the form of skyscrapers, domes, mountains, signs, monuments, storefronts, trees, and other various spatial points of meaning.[13] **(figure 1-3, 1-4)**

Kevin Lynch's book, *"Image of the City"*, expresses that the elements of the city are building blocks in which people can construct a mental image of their surroundings, to inform the wayfinding experience and its successful destination finding. These are the ingredients for a well-balance understanding and legibility of the city, through its elements, which create and embed a metaphorical image of place in the user's mind.

In 1984, **Romedi Passini** wrote, *"Wayfinding in Architecture"*, which went into greater depth on the topic.[14] Years later he coauthored with designer Paul Arthur, a landmark text entitled,*"Wayfinding in People, Signs, and Architecture."* They advanced the ideas and conceptions of wayfinding in the built environment because of the economical as well as ethical obligations that designers, architects, and urban planners

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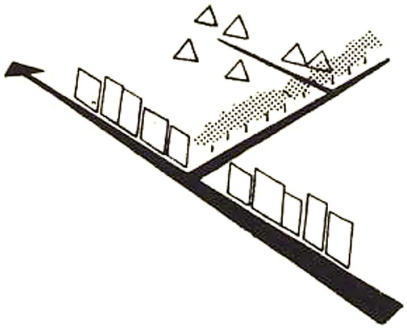

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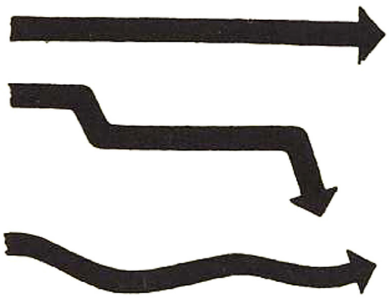

FIGURE 1-5
KEVIN LYNCH: *THE IMAGE OF THE CITY* (DIRECTION, PATH, EDGE)
FIGURE 1-6
KEVIN LYNCH: *THE IMAGE OF THE CITY* (DIRECTIONS, PATHS)

12 Ibid., 27.
13 Ibid.,27.
14 David Gibson, *The Wayfinding Handbook: Information Design For Public Places* (New York: Princeton Architectural Press, 2009),14.

need to respond too. For instance, how do the users of the built landscape find their points of destination? Arthur and Passini understood that poor wayfinding could lead to miscommunication in airports and train stations but even worse, death, when an ambulance gets lost trying to find you.[15] People die because the built environment is inaccessible by the users and confusing at times.

In 1996 architect **Richard Saul Wurman** coined the term "information architecture" in his book entitled *"Information Architects"*, which discusses communication vehicles; maps, diagrams, books, sign systems, symbols, and websites.[16] Indeed, this collection as a whole contributes to the ways in which the user traverses space and finds what they are searching for. In another of his books, *"Information Anxiety"* (1989), Wurman discovers that more information does not always equal better understanding when the urban environment is populated with symbols of information and movement. [17]

1.3 MODES OF WAYFINDING

Humans have been trying to find their way for millions of years. This ability to traverse and find one's destination is part of the characteristics that distinguish us from other animals, with which we share identical chunks of DNA. The human species has evolved from the Homo habilis or "handy man" or humans that use tools. Next, came Homo erectus or

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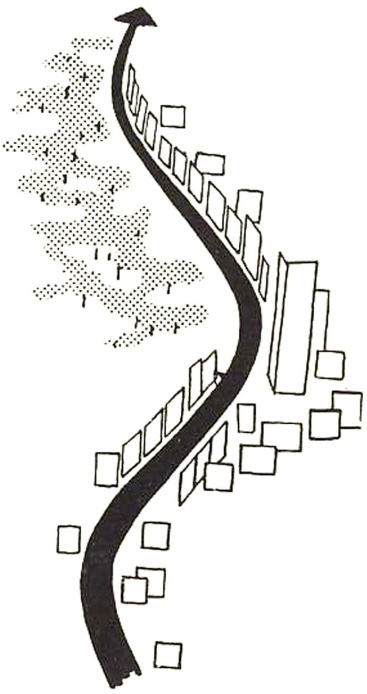

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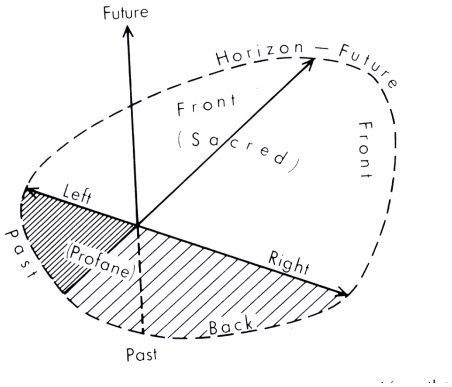

FIGURE 1-7
KEVIN LYNCH: *THE IMAGE OF THE CITY* (PATH)
FIGURE 1-8
YI-FU TUAN: *SPACE AND PLACE: THE PERSPECTIVE OF EXPERIENCE* (EXPERIENTIAL DIAGRAM)

15 Peter Morville, *Ambient Findability* (Sebastopol, CA: O'Reilly, 2005), 29.
16 David Gibson, *The Wayfinding Handbook: Information Design For Public Places* (New York: Princeton Architectural Press, 2009),15.
17 Ibid.,15.

"upright man", who could use bipedal locomotion with hands free and heads up, while in movement. Finally, to the Homo sapiens or "thinking man" who has intelligence and the ability to communicate with language, a combination of symbols and signs. **(figure 1-8)** Most of human history, we have wandered our habitat without the use of tools for navigating such as compasses, maps, or signs, having to rely on the awareness of our own bodily and perceptive movements. These movements could serve as integrations into paths that one traverses while one pays close attention to the visual clues for survival.

Most of this tacit ability to read one's environment has been abandoned by more sophisticated and easier methods, which technology now affords us. People of Polynesia could navigate the oceans without instruments for thousands of years, a technique and skill, learned over a lifetime. They explored the vastness of the ocean and discovered the islands of Samoa, Tonga, Hawaii, and New Zealand by canoe.[18] The seafaring explores relied on observations of the environment to give them a sense of orientation. The sun, moon, planets and stars gave them a frame of reference while the winds, ocean swells, landmarks, and seamarks that composed of small schools of fish, flocks of birds and even driftwood served as local clues of land proximity.

18 Peter Morville, *Ambient Findability* (Sebastopol, CA: O'Reilly, 2005), 21.

wayfinding tools

Sailors had to start getting inventive in the strategies and solutions because the risk was too great of getting lost. The solutions that they created were a lighthouse, compass, chip log, sextant, and chronometer to help for orientation and direction at sea.

lighthouse

Bonfires were the earliest lighthouses recorded and they served as landmarks for sailors at night. The lighthouse at Alexandria was built around 270 B.C. and is one of the seven wonders of the ancient world. Standing at 400 feet, it was the tallest man made structure in the world. [19] During the day it reflected light and at night it produced light for finding land.

compass

The first recordings of compasses being used were by the Chinese. They used a magnetic device for land finding that was called a "point south carriage" in the third millennium B.C.[20] It did not become widely used in the west until the 1700's because many believed it to be black magic and a mystical object. **(figure 1-9)**

chip log

A dead reckoning method to find out distance traveled at sea was composed of a chip of wood tied to a long rope with knots that was thrown over board. While the boat was moving an hourglass would be used to capture the time it took for the knots to pass, which is why we refer to miles –the boat traversing on the water– as knots. [21]

19 Ibid., 22.
20 Peter Morville, *Ambient Findability* (Sebastopol, CA: O'Reilly, 2005), 23.
21 Ibid., 23.

sextant
A breakthrough in global positioning provided sailors their latitude (or the north and south positioning) within a mile or two. That was achieved by measuring the angle of the sun, moon, planets, and stars with regard to a horizontal line of reference. [22] They could refer to an almanac that was prepared for them by astronomers to forecast the future positions of these terrestrial bodies or constellations. **(figure 1-10)**

chronometer
An achievement that was realized in 1764 by John Harrison, won him the British prize. People could now circumnavigate the world. This seagoing instrument was accurate to one-tenth of a second per day, which allowed Captain James Cook to navigate the entire globe with precision.[23]

1.4 MAP AS WAYFINDING INSTRUMENT

Inventors kept at it until they could calculate any distance, direction and position on the planet. Indeed, none of this would have been possible without the creation of the map. The oldest recordings of maps were preserved on Babylonian clay tablets from 2500 B.C. [24] **(figure 1-11)** The ability to create a symbolic representation or map from a "cognitive map"[25] is a useful tool for communication of experience and geographic terrain. This allowed us to explore further and further without the fear of getting lost. Maps help to guide people to their destinations while avoiding potential hazards in the environment.

1-9

1-10

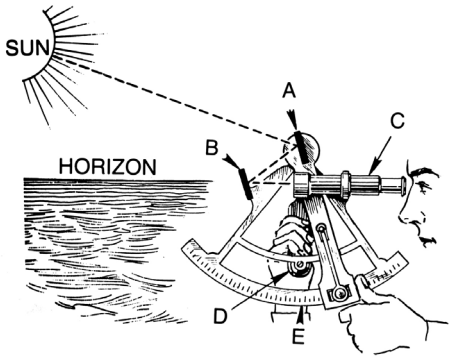

FIGURE 1-09 WAYFINDING TOOL (COMPASS)
FIGURE 1-10 WAYFINDING TOOL (SEXTANT)

22 Ibid., 23.
23 Peter Morville, *Ambient Findability* (Sebastopol, CA: O'Reilly, 2005), 24.
24 Ibid., 24.
25 Ibid.,19.

Maps are generalizations, estimations, and representations at best, which can only use a selection of information about the site. That is, maps omit information in order to pull out what is important to the task at hand.[26] Mapmakers decide what paths, landmarks, and boundaries to reveal and what to hide, in order to communicate clearly and simply to the user.

Traversing space employs having a system of signs and symbols that aid in destination finding. For example, in Beijing, the Forbidden City uses specific colors to signify the imperial ownership. The colors of red and yellow where seen as signs of wealth and prestige that only the emperor could use within the city.[27] In Cambridge, the coat of arms signifies each of the colleges, creating a sign that communicates an identity. **(figure 1-12)** Each college communicates something distinctive while the user of the space attaches meaning to the environmental cues.

In the later half of the nineteenth century, roads began to connect city inhabitants to their work place as well as to recreational destinations. This mass transit system of railroads was an early need for mapping the ways in which we navigate. Answering this problem was a map of graphic representation, which can communicate the routes to the users by color and form. For instance, Harry Beck's design of the London Underground in 1933 set a precedent that changed the way in which we make and

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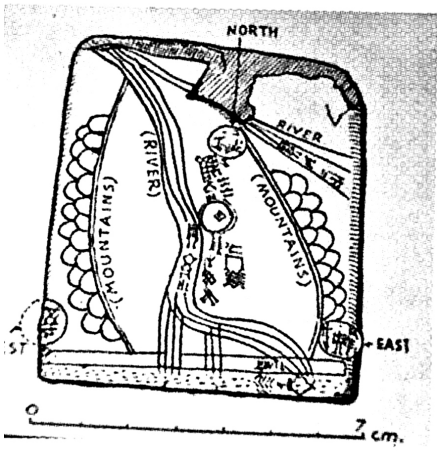

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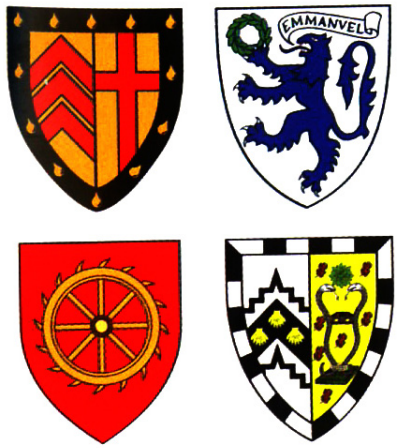

FIGURE 1-11
BABYLONIAN CLAY TABLETS FROM 2500 B.C.
FIGURE 1-12
DAVID GIBSON: *THE WAY-FINDING HANDBOOK* (CAMBRIDGE COAT OF ARMS)

26 Ibid.,24.
27 David Gibson, *The Wayfinding Handbook: Information Design For Public Places* (New York: Princeton Architectural Press, 2009), 38.

read maps today.[28] **(figure 1-13)** His organization of the routes was to use a consistent angle and typography in a rational grid. This gave clarity of readability with the use of hierarchies of scale and proximity to each of the elements of the composition.

1.5 DIGITAL INSTRUMENTS OF WAYFINDING

Electronic media is becoming increasingly used for wayfinding and communication in social spaces instead of in coordination with static signs that are unchanging. In this age of electronic information there is a dynamic relationship within the experience of a space and its rapid flux of movement that the user practices on a ritual basis. These types of signs that communicate through digital interfaces are useful to the navigation of the built terrain. Through these wayfinding instruments, such as large-scale LED displays, broadcast monitors, interactive kiosks and mobile devices, people are able to navigate to their destinations with more accuracy.

large scale LED displays

A Building's digital signage can become art and advertising space that informs the wayfinding experience. **(figure 1-14)** Large-scale LED displays are becoming used more frequently because of the high visibility that makes this type of medium easily integrated into large outdoor spaces, such as retail and sporting events.[29] Today, these electronic signs take the form of identification, advertising, exhibitions, and even images that wrap the facade of buildings with high resolution. These signs communicate through LED technology to provide enter-

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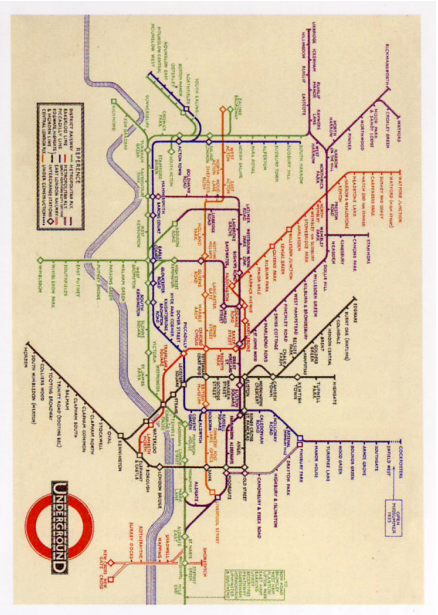

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FIGURE 1-13
DAVID GIBSON: *THE WAYFINDING HANDBOOK* (LONDON UNDERGROUND TRANSIT MAP)

FIGURE 1-14
DAVID GIBSON: *THE WAYFINDING HANDBOOK* (LARGE SCALE LED DISPLAYS)

28 Ibid., 40.
29 David Gibson, *The Wayfinding Handbook: Information Design For Public Places* (New York: Princeton Architectural Press, 2009), 118.

tainment, information, and branded content for the user of the urban fabric.

broadcast monitors

Monitors are seen as a more conventional use of digital communication because of their use in airports and other transportation facilities. **(figure 1-15)** Monitors inform the user of the space by giving them essential travel information that includes arrival and departure times. Other uses of this "internal-electronic" in wayfinding can be seen in public places such as hospitals, conventions, universities, hotels, and retail centers.[30] This media extension allows for a type of broadcast that influences the user's experience of space and direction. The digital media we encounter in our daily routine is influencing the movement of the body through space to a given destination. This can become distracting and disorienting from a path in space the user is occupying.

interactive kiosks

These interactive kiosks are everywhere in the built landscape. **(figure 1-16)** On every street corner, usually near a gas station, there is an ATM, which disperses funds and resources to the user. In airports and hospitals, wayfinding information is merging with other functions or devices.[31] These kiosks are tools for wayfinding because they communicate to diverse audiences through variety languages and symbols. These systems of orientation are read and understood through a graphic representation that projects on the screen for the user.

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1-16

FIGURE 1-15 DAVID GIBSON: *THE WAYFINDING HANDBOOK* (BROADCAST MONITORS)
FIGURE 1-16 DAVID GIBSON: *THE WAYFINDING HANDBOOK* (INTERACTIVE KIOSKS)

30 David Gibson, *The Wayfinding Handbook: Information Design For Public Places* (New York: Princeton Architectural Press, 2009), 118.
31David Gibson, *The Wayfinding Handbook: Information Design For Public Places* (New York: Princeton Architectural Press, 2009), 118.

mobile digital devices

With the advent of technology, global positioning systems (GPS), and wireless networks, wayfinding in mobile devices has become extremely important and useful to users of the urban environment. **(figure 1-17)** These applications on the user's personal digital assistant (PDA) have the potential to give wayfinders many options.[32] Connectivity on the Internet allows for an even bigger scope of responses and directions allowing users to navigate physical and digital realms while traversing space. The need for connectivity and user interaction within communities allows the experience to become a global and local act of traversing. The user is a participant and a viewer of space, however, they are in a constant state of flux, through their movements towards destinations of place and desire.

world wide web

The World Wide Web has become a "global digital resource" [33] for networking, browsing, and shopping for the user. People can plan their vacations and book their tickets to any place on the planet. The system serves as repository of up-to-the-minute news coverage and information on current events. Google Earth has expanded our ability to virtually explore the terrain from local, regional, and global views.[34] A consistent experience for the user is important because a particular destination will have an identity that communicates messages to its audience. The Internet's resources can help users plan and map where they are going. This holistic approach of identity and place

32 Ibid., 119.
33 David Gibson, *The Wayfinding Handbook: Information Design For Public Places* (New York: Princeton Architectural Press, 2009), 119.
34 Ibid.,119.

1-17

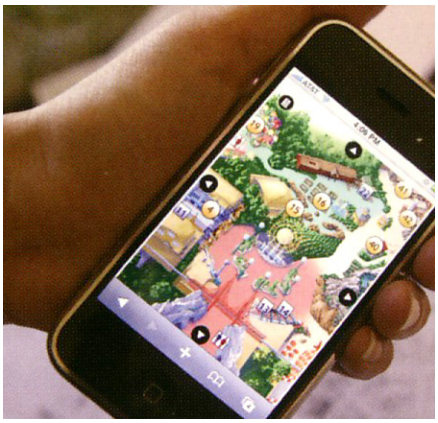

FIGURE 1-17
DAVID GIBSON: *THE WAYFINDING HANDBOOK* (MOBILE DIGITAL DEVICES)

can merge systems of wayfinding within the destination, from the initial planning stage to the implementation, which directs the user to the destination, thus creating an experience that is unique and findable.

1.6 COMMUNICATION OF SIGNS

Most of the wayfinding systems are composed of signs, which communicate specific types of information to the user of the space. These categories of signs either communicate identification, direction, orientation or regulatory information for the user. [4] This system can influence the user's experience of the place and create an identity that is unique. A weaving of signs and symbols is crucial to a continual narrative of the space that the user enters into. They observe and experience by traversing the terrain to these points of interest in the built environment.

identification signs

These signs are "visual markers" [35], that display an identity and characteristic of a

35 David Gibson, *The Wayfinding Handbook: Information Design For Public Places* (New York: Princeton Architectural Press, 2009), 48.

place while creating key identifiers of transitional space and boundary. Wayfinding's primary system of signs communicates the names and functions of the place or space, which makes up the built landscape, individual buildings, city gateways and monuments. **(figure 1-18)** Signs signify entrances and exits while clearly marking transitional space from one place to another. When placed and designed appropriately they communicate a places identity explicitly, through a logotype or generally an image. This 'gateway' evokes a feeling and an emotional response of the viewer, to identify and perceive, as a cue of entry.

directional signs

The circulatory system of wayfinding is made up of directional signs that give the necessary cues for guiding the user in the space to their destination. This type of sign guides pedestrians and vehicular traffic to key points and destinations by displaying graphic signifiers through symbols, arrows, and type.[36] **(figure 1-19, 1-23)** These signs should be obvious and straightforward, while integrating as an element in the built landscape for delivering messages of a wayfinding information and content.

orientational signs

Orientational signs allow the user to see an aerial view of the site and a directory, which helps to find destinations and points of desire. Usually, an indicator of the users place and position is shown on the map and is used as a reference point, which orients the user to the site. **(figures 1-24, 1-21)** An orientation map needs other wayfinding

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FIGURE 1-18
DAVID GIBSON: *THE WAYFINDING HANDBOOK* (IDENTIFICATION SIGNS OF PLACE–GATEWAYS)
FIGURE 1-19
DAVID GIBSON: *THE WAYFINDING HANDBOOK* (DIRECTIONAL AND IDENTIFICATION SIGNS)
FIGURE 1-20
DAVID GIBSON: *THE WAYFINDING HANDBOOK* (REGULATORY SIGNS)

36 David Gibson, *The Wayfinding Handbook: Information Design For Public Places* (New York: Princeton Architectural Press, 2009), 50.

signs, such as identification and directional signs to communicate to the user of the circulation routes. With multi-level structures an orientation map is usually in architectural plan view or axon with an indicator of "you are here" points of reference for orientation.[37] On outdoor maps, these maps indicate boundaries, entries, buildings, and other spaces that serve as destinations and nodes.

regulatory signs

A regulatory sign communicates what a user can do in a space. These signs serve to inform the user of the dangers that exist in a building. **(figures 1-20, 1-22)** This communication should be well crafted and unobtrusive but clearly understood at a distance while enhancing the experience of the place.[38] Moreover, the message should seem an essential part of the place in which it is found.

maps and symbols

The primary indicators of wayfinding are the words and symbols that we put on destinations and the ways in which we identify paths to those places. Maps and symbols allow for a graphic communication that represents information concisely even across cultural lines. In public places where cultures are brought to gather as global citizens, i.e., airports, train stations, shopping malls, and hospitals, these symbols are quite useful for the user's traversal to specific destinations. Symbols or the icons of wayfinding in a space allow the user an ability to read without knowing the language of the place.[39] They also communicate visually rather than verbally because they are abstractions of the

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FIGURE 1-21
DAVID GIBSON: *THE WAYFINDING HANDBOOK* (ORIENTATIONAL SIGNS)
FIGURE 1-22
DAVID GIBSON: *THE WAYFINDING HANDBOOK* (REGULATORY SIGNS)

37 Ibid., 52.
38 David Gibson, *The Wayfinding Handbook: Information Design For Public Places* (New York: Princeton Architectural Press, 2009), 54.
39 Ibid., 97.

original representation in a graphic form. Indeed, symbols communicate at a glance and convey information in a split second for the user to find their way.

Symbols create a universal meaning, which connect different cultures together in a dialogue of visual graphic form. For example, the AIGA, a professional design association that developed a family of symbols for the United States Department of Transportation (DOT) has become a standard for wayfinding since its completion in 1981.[40] **(figure 1-23)** This family of icons and symbols allows for communication on an abstract level of representation, while coincidently establishing a sense of identity, thus, functioning as a wayfinding tool of iconography for traversing the terrain.

Maps are a composition of images and symbols, which communicate a narrative and a story of a place.[41] To understand this they need to be able to decode the visual information. Maps help the user find what they are looking for. For example, they use diagrams of orientation to describe the place and the arrangement of geometries in space to the user. This instrument of wayfinding helps the user become more familiar with the place and its terrain while traversing towards multiple destinations.

In addition, maps give an overview of a public place, which can take the form of an organization, building, or any space that occupies the environment.[42] Also, pathways of the place are important in mapping because this

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1-25

FIGURE 1-23
DAVID GIBSON: *THE WAYFINDING HANDBOOK* (ICONS AND SYMBOLS FOR THE D.O.T.)
FIGURE 1-24
DAVID GIBSON, *THE WAYFINDING HANDBOOK* (ORIENTATIONAL MAP)
FIGURE 1-25
DAVID GIBSON: *THE WAYFINDING HANDBOOK* (PLACE BRANDING, NEW YORK: BROOKLYN DOWNTOWN)

40 David Gibson, *The Wayfinding Handbook: Information Design For Public Places* (New York: Princeton Architectural Press, 2009), 97.
41 Ibid.,100.
42 Ibid.,100.

allows the user the ability of movement and traversing a space. These representations of place that are two-dimensional graphic signs are in clear visual hierarchies, which helps the user's ability to read and utilize the information.[43]

The graphic language of maps in wayfinding can borrow from the context in which it is used such as the styles and personality of the site. This can become an identity, which is communicated through the palette of the designer, and their implementation in the wayfinding of the site. For example, color in maps can communicate features of place such as the roads, pathways, buildings, parks, and waterways, which makes up a terrain that allows for traversing. But at the same time it becomes iconic in its color choice and graphic form such that it becomes a brand of place for the inhabitant. Maps or representations in wayfinding of place, tend to apply text directly on the illustration. [44] For instance, a graphic key of symbols and color can help the user decode and make meaningful relationships for finding things in the landscape.

1.7 WAYFINDING AND PLACE-MAKING

Way-making brings up the notion that identity plays a part in the experience of a space. This implies a sense of place that the user encounters on their traversing of the landscape to get to a specific destination. The identity of place can express a certain style in its choice of color, typography, and the symbolic relationships that it produces in the cognitive mind, thus allowing the participant in this terrain of signs and symbols to find their way, which can be disorienting at times. A style in the graphic representation in wayfinding can give a sense of comfort and trust in which the user of the environment recognizes as reason to continue on a path. Indeed, the wayfinding experience and communication needs to be unique and memorable for the user because the identity of a place is a memory that forms a lasting impression on the mind.

An identity of a place can influence the users experience and movement to a destination, when the visual cues within an environment become site specific and embedded. These elements contribute to the wayfinding system, which then allow the user to traverse a landscape with a destination and goal in mind. For example, Brooklyn, a borough of New York, was revitalized and made more accessible to the users of the space by enhancing and redesigning the wayfinding of its terrain, [45] **(figure 1-25)** while at the same time connecting more to the neighboring city in which it is embedded. This enables more circulation and pedestrian flow to happen that makes wayfinding a crucial system to be in place. Downtown Brooklyn is a mix of business and commerce that intermingles twelve neighborhoods in a walkable pedestrian center, creating a network of spatial movement.

43 Ibid.,100.

44 David Gibson, *The Wayfinding Handbook: Information Design For Public Places* (New York: Princeton Architectural Press, 2009), 100.

45 David Gibson, *The Wayfinding Handbook: Information Design For Public Places* (New York: Princeton Architectural Press, 2009), 72.

conclusion

The hidden logic of a site can incorporate many patterns of movement and spatial organization. This can set up a unique sense of place, which forms a part of wayfinding. The framework is dependent on this understanding of movement as a pattern of a much larger whole that the user participates in towards a goal or destination. Indeed, this can lead to discovery and encountering with unexpected results within a trajectory of movement.

Most **wayfinding strategies** are based on ideas of connectors, districts, landmarks, and streets because they help the user in traversing the terrain, which forms the circulation.[46] These maps are simple diagrammatic views of the landscape that helps the user discover points within a spatial terrain of desire. People learn to use wayfinding systems as a tool for traversing. This can take the form of district-to-district, along corridors and streets, and even between landmarks.[47] The essence of motility in space towards a point of impulse and desire, is an inherent characteristic of human mobility. Labyrinthine in nature, the urban terrain signifies a symbolic relationship as well as a journey of movement and progression by the user. Moreover, wayfinding tools can navigate the user through the landscape in order to meet their needs and expectations.

46 David Gibson, *The Wayfinding Handbook: Information Design For Public Places* (New York: Princeton Architectural Press, 2009), 44.
47 Ibid., 44.

02
CHAPTER

ELEMENTS OF WAYFINDING

CHAPTER 02: ELEMENTS OF WAYFINDING

The elements that afford one to find the way in a given terrain can be complex, for instance, as we traverse the topography of the urban landscape, we are influenced by a variety of visual and spatial cues. These cues of spatial orientation give the users or participants a way of finding within a network of desirable points. For example, while moving through the terrain one creates paths and trajectories of encounter, and discovery within a matrix of destinations. The participant can way-make as they traverse a path leading to a specific destination or point of desire. This act of creating meaning within a given destination or site allows the participant to uncover points that are interstitial or even implicit of desirable intention. Moreover, these spatial elements create geometries of traversing and cognition, which the participant embeds within the terrain, a labyrinth and matrix of multiple destinations.

2.1 WAYFINDING AS CONCEPT

What is needed for wayfinding to occur? Wayfinding is a composition of movement across a landscape and terrain towards a destination. This movement entails the user trying to make sense of their surroundings while orienting themselves in the terrain. These parts of wayfinding are essential, such as the landscape or terrain in which one traverses in a direction. For instance, to find ones destination while following an itinerary of movement along a path is the first step in wayfinding, yet, this movement needs a direction to start and a destination in mind to traverse the landscape with some sort of focus. Every turn that the body makes through space is

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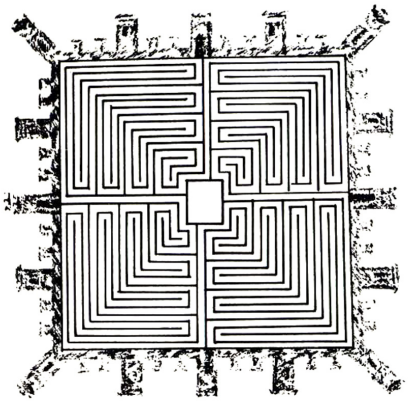

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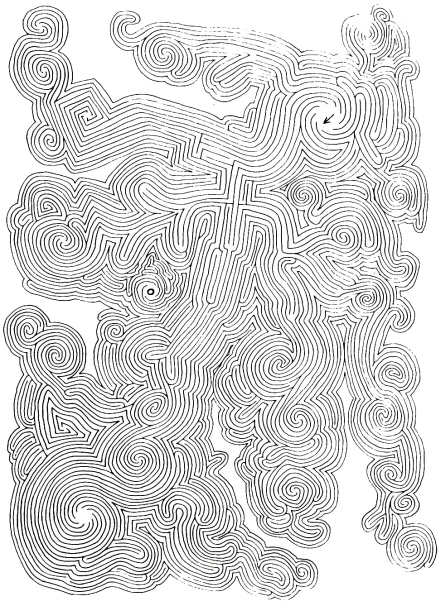

FIGURE 2-1
PAUL ARTHUR AND ROMEDI PASSINI: *WAYFINDING: PEOPLE, SIGNS, AND ARCHITECTURE* (MAZE–LABYRINTH)
FIGURE 2-2
PAUL ARTHUR AND ROMEDI PASSINI: *WAYFINDING: PEOPLE, SIGNS, AND ARCHITECTURE* (MAZE)

a direction to a specific point or encounter, which creates meaningful relationships of space and place.

Wayfinding helps one to traverse a terrain and locate a specific point in space. The traveler's itinerary through space along a path to a destination can encounter "pauses"[48] that create an instance of place and memory. The bodily movement of the user while traversing a terrain finds multiple places and discoveries along a path, in a trajectory towards a goal. These trajectories or paths can be "unicursal" [49], but in most instances they are "multicursal" [50] giving the user more options and paths to take, **(figure 2-1, 2-2, 2-4, 2-5)** which can lead to more confusion and anxiety instead of finding what they want. A solution for traversing and actually finding what one wants or desires in a given landscape, is through the use of diagrammatic graphic representations and mappings, this helps the traveler solve spatial problems of finding points of purpose and goal.

terrain and landscape

For wayfinding to even take place the user needs a terrain or landscape to traverse across. This involves bodily movement in space, which requires an extension of thought towards a specific goal. Everyone that is embedded in a system of directions and signs, for instance, in the urban landscape is given visual cues for the continual path and engagement towards a destination that one seeks.

48 Yi-Fu Tuan, *Space And Place: The Perspective Of Experience* (Minneapolis: University Of Minnesota Press, 197), 6.
49 Peter Morville, *Ambient Findability* (Sebastopol, CA: O'Reilly, 2005), 16.
50 Ibid.,16.

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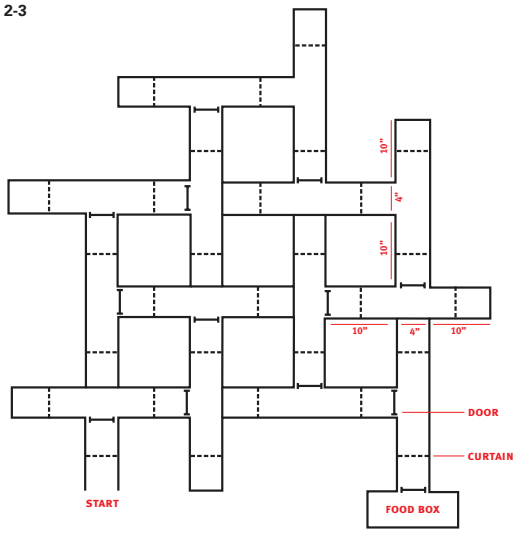

FIGURE 2-3
CLASSIC LABYRINTH USED TO RESEARCH SPATIAL COGNITION IN RATS (EDWARD C. TOLMAN)

Tolman's Labyrinth, proves that rats, like humans, do indeed create "cognitive maps"[51] or mental representations of the terrain they traverse, which is seen in the user's wayfinding tactics in their urban environment. **(figure 2-3)** The ability of creating a mental representation of the environment while traversing and exploring is crucial for finding spatial points in one's terrain.

traversing and bodily movement

The shifting of movement through space with an end or objective in sight allows one to traverse a terrain, which affords the user a tactical position of moving in a direction that is made up of activities of mobility. The bodily movements of pushing and pulling through space with gravity are seen as a cause and effect of moving towards a point of desire. Interestingly, the notion of one

51 Andrea Gleiniger, And Markus Christen, *Pattern Ornament, Structure And Behavior* (Basel: Birkhäuser, 2009), 59.

finding their way in movement is a trigger for traversing the terrain, a result of following a path, which can lead to multiple results and outcomes.

orientation and finding

The user orients oneself in the landscape because it is essential to finding their destination and their way back to the point of origin. Orientation makes it possible to understand the landscape and its terrain from a perspective of the user. One has to traverse a terrain in order to find a point or place in space which one desires. Movement in space towards a destination requires a sense of orientation and direction. The bodily movement that the user practices in space is a trajectory towards specific destination, that is, human mobility in space with a specific direction. **(figure 2-6)** This spatial relationship to the body and its movement along a path gives cues for its traversing and navigation.

journey and discovery

While on path to a destination or spatial point of desire, one encounters multiple stops along the way, which embed impulse and impression in the wayfinding experience while traversing space. The path that the user progresses on gives way to discoveries and encounters, which there are no previous signs for, only instances of the user's "cognitive map"[52] or mental trajectory. These situations afford the user of the terrain many options on how to move and find but they can also produce anxiety-filled experiences and a chance of becoming lost. Our well-being is intricately connected to

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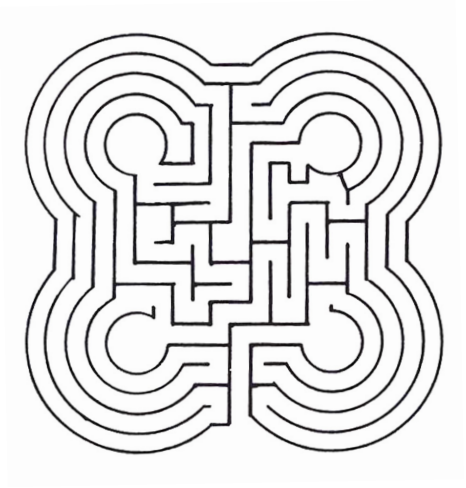

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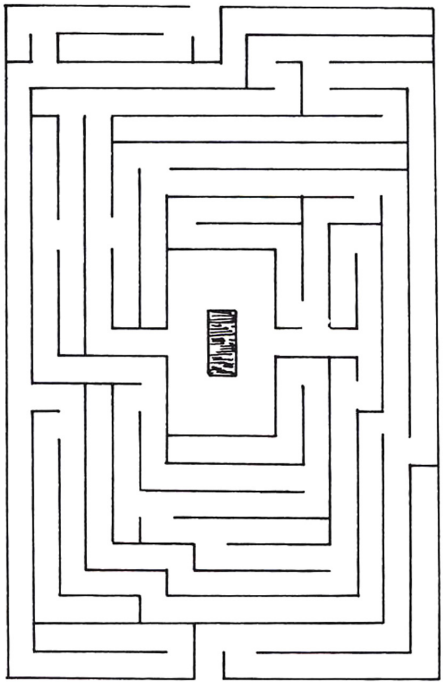

FIGURE 2-4
PAUL ARTHUR AND ROMEDI PASSINI: *WAYFINDING: PEOPLE, SIGNS, AND ARCHITECTURE* (MAZE–LABYRINTH)

FIGURE 2-5
PAUL ARTHUR AND ROMEDI PASSINI: *WAYFINDING: PEOPLE, SIGNS, AND ARCHITECTURE* (MAZE)

52 Andrea Gleiniger, And Markus Christen, *Pattern Ornament, Structure And Behavior* (Basel: Birkhäuser, 2009), 59.

finding these seemingly familiar places that we recognize as having meaning in our lives.

2.2 SPATIAL COGNITION

We tend to remember a lot of things about the environment while traversing its landscape. These ritual practices that people create are patterns which wayfinding influences and sets up. For example, through the integration of landscape elements, such as paths, landmarks, and built forms, modes of wayfinding can take root.**(figure 2-7)** The movement of the traveler can take the form of mechanical as well as bodily modes; towards destinations at different velocities.

The form of the buildings and the size, contours, complexity of shapes, and uniqueness of architectural style creates an experience for the user. [53] Other visual cues that can cause shifts in cognitive thought are the elements of visibility and access that the pedestrian experiences as part of the habitual routine of traversing a terrain. Architectural cues can serve as parts in the wayfinding experience of a terrain while directing one's movement towards a specific goal of intent.

Spatial participation in this symbolic representational landscape allows the user to make sense of one's surroundings. He or she is playing a role, in which the historical and cultural meaning that is associated with the built landscape informs and influences the memory and significance of its

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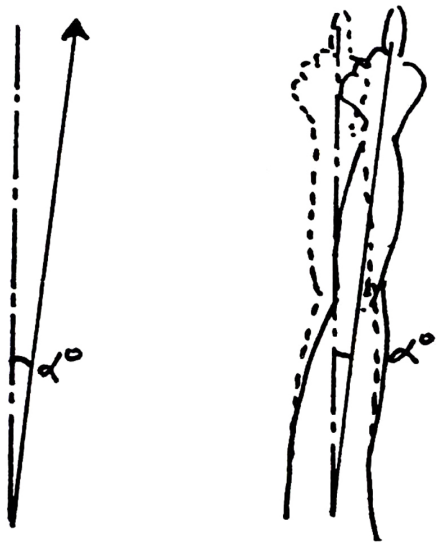

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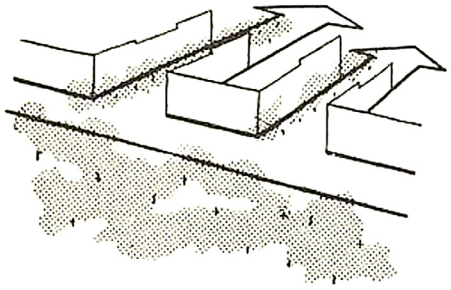

FIGURE 2-6
PAUL ARTHUR AND ROMEDI PASSINI: *WAYFINDING: PEOPLE, SIGNS, AND ARCHITECTURE* (DIRECTIONAL CUES AND DIRECTION OF DEGREE)

FIGURE 2-7
KEVIN LYNCH: *THE IMAGE OF THE CITY* (SPATIAL PATH AND DIRECTION)

53 Paul Arthur And Romedi Passini, *Wayfinding: People, Signs, And Architecture.*(New York: McGraw-Hill Book Co., 1992), 37.

place.[54] Each participant is experiencing a cognitive relationship from the visual cues that formalize in the landscape; that is, the formal architectural gestures, which manifest themselves in space, to the network of spatial targets or points in the terrain.

Key indicators in signs help identify the locations in a system of elements that orients the user. These signs are seen to guide and influence the decisions of the user while traversing the terrain towards an ultimate goal.

The influence of the environment on the wayfinding ability to create a mental cognitive map is crucial. This cognition of the environment is an important aspect for recognizing your surroundings because it allows one to remember the buildings in the cityscape and the settings characteristics.[55] These typologies that one encounters in the environment affords the user the ability to cognitively map the terrain or ground, which creates and formalizes directions of path and destination. **(figure 2.8)** These spatial characteristics of the environment such as the points of reference, triangulation of routine and function, allows for this exchange and negotiation of spatial motility. The cognitive routines of the user within their environment create these structures that formalize paths of circulation.

2-8

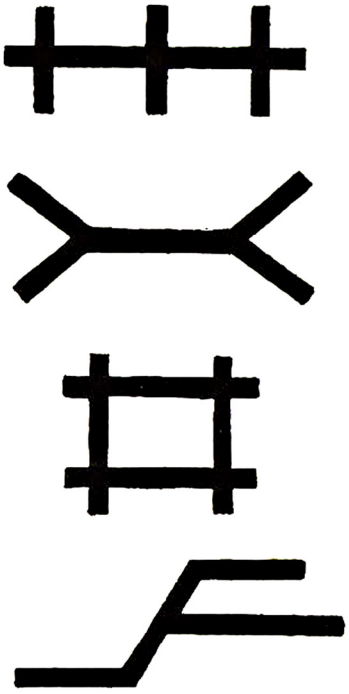

FIGURE 2-8
KEVIN LYNCH: *THE IMAGE OF THE CITY* (NETWORK OF PATHS AND CONNECTIONS)

54 Paul Arthur And Romedi Passini, *Wayfinding: People, Signs, And Architecture.*(New York: McGraw-Hill Book Co., 1992), 37.
55 Ibid., 37.

This idea of "accessibility" [56], around the building adds to this notion of key indicators in the cities landscape, which help create cognitive mappings that give the user orientation within a given context.

An Individuals memory of the surroundings when exploring is directly connected to "topographical relationships" [57] that connect to critical elements. These are understood without relying on specific information given, such as representational maps but signs throughout one's movement allow for direction and orientation.

This ability of observing and wayfinding allows the user to seek and find what is a desire or need, and is a crucial trait in a new environment. These spatial cognitive shifts that record landmarks and memorize certain forms, help anchor reference, which integrate forms of circulation and path.[58]

In **figure 2-9**, there are multiple points of traversal from a given origin or destination point, which manifest in moments of desire, these stops along the way give direction to the participant, a temporal practice of space with movement. The temporality of movement over a twenty-four hour

56 Paul Arthur And Romedi Passini, *Wayfinding: People, Signs, And Architecture* (New York: McGraw-Hill Book Co., 1992), 55.
57 Paul Arthur And Romedi Passini, *Wayfinding: People, Signs, And Architecture* (New York: McGraw-Hill Book Co., 1992), 38.

58 Paul Arthur And Romedi Passini, *Wayfinding: People, Signs, And Architecture* (New York: McGraw-Hill Book Co., 1992), 38.

2-9

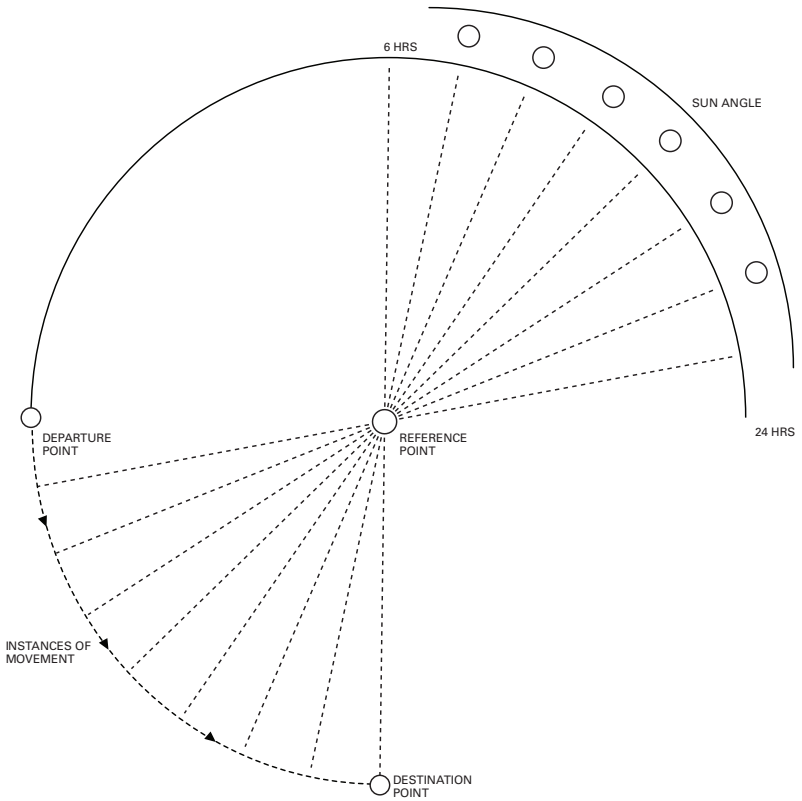

FIGURE 2-9
SPACE, TIME AND MOVEMENT

period with the sun's angle as an indicator of orientation is an anticipation of inherent spatial ability that allows one to traverse a given terrain. While still entertaining the notion of spatial arrangement, some would argue that districts are just as important or even more holistic from a planning view because they serve as a means of organization. Indeed, each and every environment, and the personal preferences, which are embedded within a culture and social matrix, influences this organization of districts and paths for navigation.

Personal exploration of the environment to formalize a schematic understanding of its spatial details is an aspect of orienting oneself, which can be abstract and personal in nature because of the internalization that occurs within each and every person. The memories that one has of their environment are representations of this setting that helps in the navigation and "spatio-cognitive manipulations" [59], of the users surroundings for wayfinding tasks.[60] These tasks vary from cognitive mapping to an array of manipulations and variations, which inform the users wayfinding abilities.

2.3 LANDSCAPE AS WAYFINDING SYSTEM

When planning large areas for the ability to facilitate the wayfinding experience, landscape architecture plays a role. Planning a layout sets the stage in articulating the landscape that can communicate to the user's navigational perspective of finding.[61] This task of designing the landscape is composed of paths, landmarks, and destination zones, which organize the space and communicate to the wayfinder a set of spatial cues. **(figure 2-10)** These visual cues have influence on how the user enters a building and sees its accessibility within the landscape.

Wayfinding can serve as a way of organizing and spatially planning the urban landscape for an intended experience for the user. This can be created through the integration of constituent spatial units that are identifiable in an embedded context of groupings, such as zones to further link them to other zones in an organization.[62] These zones are areas of destination that the user identifies with as experiential moments and memories, which create a need and desire to participate in its internalization.

The sense of identity that is distinct and creates meaning within a system of finding, allows for this digestion within the users consciousness. This identifiable spatial element gains distinction from other objects in the landscape because this difference of space has the potential for imprinting in the mind. For example, these distinctions can be communicated by the form and volume of the space that defines the architectural and decorative elements and by the facade treatment such as the use of finishes, light, colors, and graphics.[63] The use of symbolic meaning and expression that create social connections within a given context promote uniqueness and identity, which

59 Ibid., 38.
60 Ibid., 38.
61 Paul Arthur And Romedi Passini, *Wayfinding: People, Signs, And Architecture* (New York: McGraw-Hill Book Co., 1992), 43.
62 Ibid., 87.
63 Paul Arthur And Romedi Passini, *Wayfinding: People, Signs, And Architecture* (New York: McGraw-Hill Book Co., 1992), 85.

increase its ability of being found in a specific location.

These locations become activated by peoples' behavior and create a unique atmosphere, which has an identity of its own. This formalization contributes to activities that people have such as market places that people inhabit for a limited time and is seen as not being permanent, while still serving as a destination.[64] A strong sense of identity is created by these activities, which is used to define urban squares and specific streets within the urban matrix even if it is for a short time.

When grouping similar destinations in a spatial framework these elements need to have a common thread that creates this findability. Equivalences are the characteristic that allows one to identify and group these destinations into specific zones of interest, which form nodes of information exchange and shared services.[65] This understanding affects the sense of wayfinding in the user's ability to cognitively map the surrounding landscape and formalize the findings to make clear choices on how to find their way.

Wayfinding in the city relies on circulation of paths, which helps the user find their chosen destination. The circulation of space creates these moments in which the user must find their way and decide on a chosen path.[66] Our wayfinding decisions are dependent on these spaces and have the potential to create unique instances of experi-

2-10

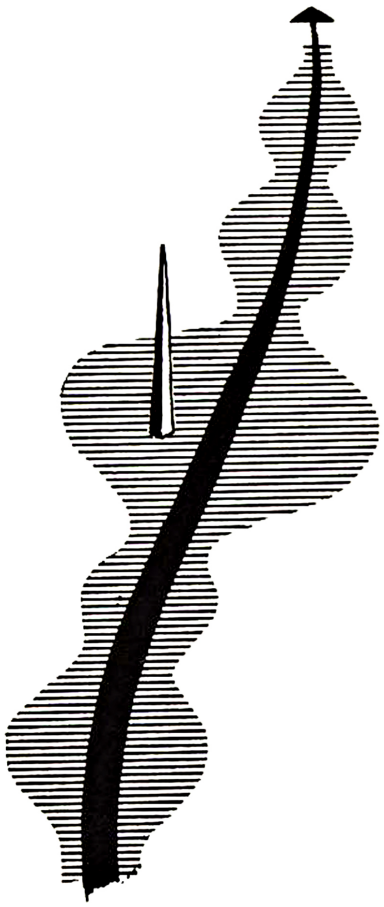

FIGURE 2-10
KEVIN LYNCH: *THE IMAGE OF THE CITY* (TRAJECTORY AND DIRECTION ACROSS THE TERRAIN)

64 Ibid., 87.
65 Ibid., 87.
66 Paul Arthur And Romedi Passini, *Wayfinding: People, Signs, And Architecture* (New York: McGraw-Hill Book Co., 1992), 89.

ence for the user. Creating these instances of choice allows the user to cognitively imprint and map their surroundings. Indeed, the circulation system as a whole is the "bone structure"[67], we can learn from and understand its implication in the spatial organization of the architecture in the context of the urban landscape.

Each and every city has a system of circulation that corresponds to a particular pattern and the way the user interacts with it. For example, the physical attributes of circulations can resemble linear, centralized, composite, and networks as typologies that can recognize as patterns of finding in the landscape.[68] These patterns facilitate the wayfinding experience and channel it to the destination of desire that the user projects. Spatial units that anchor meaning and points of destination are found within the urban condition. These are important to the user's context, yet the points of desire are what are seen as organizing elements within a context of the spatial plan. These patterns can influence types of circulations that make wayfinding that much more advantageous to the user.

The circulation patterns that create better wayfinding experiences are composed of different notions of how one organizes one's space and retrieval of information. In a semi-systematic way, one's cognitive impression in the mind influences the ways of finding directions, paths, and spatial points. These patterns can be grouped into four categories; shoestring, gestalt, systemized, and re-

2-11

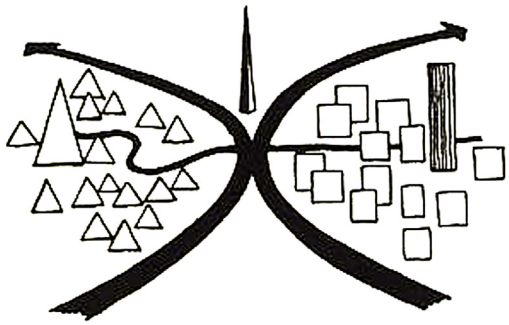

FIGURE 2-11
KEVIN LYNCH:
THE IMAGE OF THE CITY (LANDMARKS, PATHS, AND EDGES)

petitive patterns.[69] This "decision making"[70], can be understood as a form of cognitive mapping of the landscape for better findability to take place, which influences the pattern of circulation.

Pattern making in the response to creating better experiences and ways of finding for the user is a fundamental aspect that needs to further articulation. For example, each and every pattern as "gestalt" or image can be received as a partial view while traversing its matrix of paths as a user. [71] This mental construction is a product of a well-patterned wayfinding system that can add a utility, which is essential in the success of an urban district and nodal experience within a matrix of points. **(figure 2-11)** These intersections that form this "gestalt" are imprinted in the internal and external

67 Ibid., 89.
68 Ibid., 89.

69 Paul Arthur And Romedi Passini, *Wayfinding: People, Signs, And Architecture* (New York: McGraw-Hill Book Co., 1992), 105.
70 Ibid., 108.
71 Paul Arthur And Romedi Passini, *Wayfinding: People, Signs, And Architecture* (New York: McGraw-Hill Book Co., 1992), 108.

landscape of the body in relation to its context of urban form.

Wayfinding can act as a system for organizing elements that communicate an image of the environment for the user. This image that was explained by Kevin Lynch in the book *"Image of the City"*, is a way of organizing notions of imagery, which communicate to the user on an experiential and representational level. These elements connect to the viewer and user as a form of sign in the landscape that has importance to the orientation of the user. **(figure 2-12)** The elements of orientation, such as urban forms, signs, and open spaces, serve a purpose in helping guide the user. These urban parts can also create a frame of reference for the user's movement, which allow for attaching and anchoring of meaning to their surroundings. Indeed, this association of meaning in mental mapping, in the urban landscape, helps create an inherently or intuitively formal mode of recognition. At the same time the user has the ability to cognitively map their surroundings, through a fluctuation of spatial images.

The user of the city is a subject of a matrix of communication and representation while finding their way to spatial points of desire. This understanding is increasing the "cross-model perception"[72], which is a multifunctional aspect the city as a network of communication.[73] This increase of communication allows the observer to be able to coordinate and regulate at some degree a state of orientation, which helps embed perceptual and cognitive abilities for

2-12

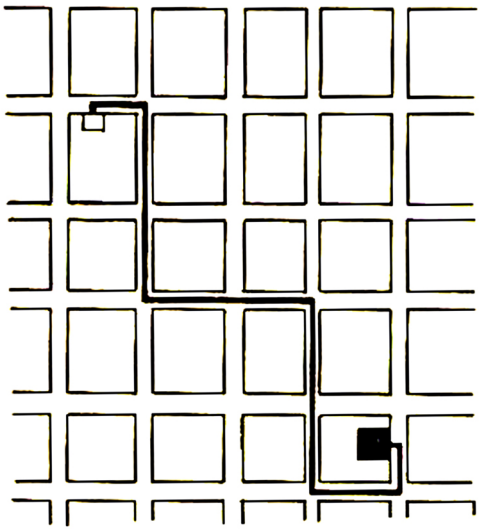

FIGURE 2-12
KEVIN LYNCH: *THE IMAGE OF THE CITY*
(PATH AND TRAJECTORY TO A POINT OF DESTINATION)

navigation. Nonetheless, communication as architecture or a conceptual reading of the environment responds to a "multifunctional and multimodal"[74], means that create a sense of place and spatial direction.

All people tend to form mental images of their surroundings or spatial points that help orient them to a particular place and destination. These paths that one takes are remembered and cognitively mapped, affording the user of the urban matrix an advantage in finding their place over less known means.[75] The theory of gestalt in the way we interpret our environment can be used to enhance our perceptions and wayfinding ability, which is perceived in fragments that form images in the mind for a better sense of orienting oneself. Wandering is an inherent characteristic of humans that comes out of a need and desire for

72 Donald Preziosi, Architecture, Language, And Meaning (New York: Mouton Publishers, 1979), 93.
73 Ibid., 93.
74 Ibid., 94.
75 Christian Norberg-Schulz, *Genius Loci: Towards A Phenomenology Of Architecture* (New York: Rizzoli, 1980), 85-88.

belonging, which transitions to dwelling and eventually to a habitual place of existence.

2.4 SPATIAL BEINGS AS WANDERERS

Humans that experience space within a given context already inherently have the ability to orient themselves in space to a degree. This ability to cognitively map the landscape and make sense of it allows an orientation of oneself, while at the same time creating an instance that forms an image or "schemata"[76] that allows for identification of the landscape and the personal connection to be made. We still try to find the destination that gives us a direction, which might be accidentally found, while we are observers of the "lived space".[77] This spatial experience is interwoven within humans as beings, who perceive our environment and create meaning out of our surroundings.

The places in which we find ourselves are accumulations of things that have identifiable parts that create a totality of memory. These actions and instances of space, which are integral of place, are being occupied through time. Place and space fuse in an instance that human beings can track and make sense of as a "schemata"[78] that creates a spatially inhabitable place.[79] These places create memories that anchor meaning in the mind. In order to inhabit space and make sense of it by assigning meaning, experiencing it must take place. Within the realm of "lived space" [80], humans interact with their surrounding, for instance, the 'natural' landscape and the 'man-made' things take form to give us a sense of the places character. These characteristics allow for an anchoring of meaning to be cognitively and phenomenologically understood by the user.

2.5 TRAVERSING THE TERRAIN

When one traverses the city and then is projected above as a voyeur, it brings the user into an interesting position to read the city. Once the user is elevated above the city through various means necessary, such as an elevator or a skyscraper, this approach is a God's eye view.[81] The view allows one to read the city and all its grammars to some degree, which can unravel the labyrinths of the urban fabric that are seen as endless.

This immense "texturology"[82], that is seen from above as a representation of the notion of what a city is visually. This multiple layering of space and the daily behaviors of the pedestrian or walker are seen as a mechanism. With this "panorama- city" [83], and it's conceptual understanding it becomes a representation of an ideal view, which changes into a simulacra of what a city should or should not be. These entities of the simulacra or walkers practicing the daily rituals of communication and traversing the landscape bring a "text"[84] to be read from afar.[85] Each body traverses the urban fabric through a series of trajectories making up a network of fragments and

76 Yi-Fu Tuan, *Space And Place: The Perspective Of Experience* (Minneapolis: University Of Minnesota Press, 1977), 67.
77 Ibid., 35.
78 Ibid., 67.
79 Ibid., 67.
80 Yi-Fu Tuan, *Space And Place: The Perspective Of Experience*. (Minneapolis: University Of Minnesota Press, 1977), 35.

81 Michel De Certeau, *The Practice Of Everyday Life.* (Berkeley: University Of California Press, 1984), 92.
82Ibid., 91.
83Ibid., 93.
84 Michel De Certeau, *The Practice Of Everyday Life* (Berkeley: University Of California Press, 1984), 93.
85 Ibid., 93.

alterations that create spaces that allow representation to take place.

The city as a conceptual basis was seen as a utopia. It was founded on the notion that it created an urbanism solution to a modern problem. This modern conception was understood as a production of space, which was a rational organization that would repress all the physical, mental, and political situations that comprised it.[86] With this in mind, a creation of the user as a subject in the city is understood through various means of conceiving and constructing space, which creates space; that is, a finite number of stable or isolated, and interconnected properties through various parts of interaction.[87] The users or participants in the matrix of spaces tend to practice an awareness that is a simulacrum of an ideal way of being which gives them an obedience of use and exposure.

These spaces that make up the concept driven city allows for transformations and appropriations to take place within the confines of its edges. The transforming agenda of the evolving city that has a place in the minds of the walkers and practitioners of the urban space brings a transparency, which configures and negotiates the spaces. But these notions of negotiating spaces and the "concept-city", [88] are decaying and with them the regulatory procedures that organized them are too.[89] Decaying or not, these mechanisms are still organizing the spaces that the pedestrians encounter on a daily basis while traversing the everyday.

The city can project a grammar that is read by the visitors and inhabitants, because the district within the urban fabric is just a part that can be understood as a landmark or "vast organism", [90] that houses many trajectories and destinations of use. This gives the urban space definition, which creates a place in the city for the user, yet, the user sees and reads the city as parts in a larger whole from different perspectives with many points of view. To be a user is to embed oneself within a matrix of modes. For example, the train station or airport has many functions that are dedicated to commerce, to transition, to departure within a unique structure.[91] These places of departure and transition from one destination to another through a series of movements, that is, bodily trajectories through space and time give wayfinding its ability to direct the user. This network of commerce creates the signification that one has when using and experiencing the city.

The entire body communicates messages that are integral to social exchange in an urban setting. Verbal as well as physical gestures and characteristics make this communication more identifiable within a system of signs. This creates a narrative that is displayed and received, which is read as text.[92] These signs or signifiers help in passing information from one user

86 Ibid., 94.
87 Ibid., 94.
88 Michel De Certeau, *The Practice Of Everyday Life* (Berkeley: University Of California Press, 1984), 95.
89 Ibid., 95.
90 Roland Barthes, *Empire Of Signs* (New York: Hill And Wang,1982), 38.
91 Ibid., 38.
92 Roland Barthes, *Empire Of Signs* (New York: Hill And Wang,1982), 10.

to another such as a meme that creates a web of links and connections. Messages and signals are internalized, understood and practiced within the social normality, which is in frequent use. Becoming embedded in the urban matrix of city represents pedestrian modes of navigation, movement, and consumption.

The "lived space"[93] of the wanderer or the walker brings up images of the people who find themselves in a system that allows for movement and ways of seeing. This creates the situation for "spatial practices" [94] to take place and become self-regulatory for the pedestrian; it follows the circuitous line of trajectory, which is observed and negotiated. These intertwined paths give shape to the spaces that are inhabited in the city.[95] Each of these spaces weaves the fabric of the urban environment for the pedestrian's movement and encountering of new situations. These spatial negotiations of space and encountering make up the city and its intricacies of circulation that the user partakes in on a ritualized basis.

The pedestrians "spatialize"[96] and confront the everyday in a practice that allows for walking and wandering the urban setting. This notion of "window shopping",[97] has its roots in the consumptive ability to observe and witness the transaction of space with voyeurs eyes. In as much as it is a spectacle of illusion it is rather a "trace left behind",[98] a memory that can only be reenacted for it's continual consumption and practice. A geographical system's perspective of an action being transcribed to place is becoming threatened and perceptually challenged.[99] Indeed, it is causing amnesia of the built environment, which lived space occupies and traversing takes direction.

2.6 SCHEMA OF ORIENTATION

One can orient oneself from memory by mapping out a departure point to a specific destination. For example, in Roland Barth's understanding and observation in the *"Empire of Signs"*, he finds that the rational system of urban planning is just another ideal notion among many, such as Tokyo, Japan, where the pedestrians are using memory and experience to traverse the urban fabric of the city. When visitors ask inhabitants directions, they can produce drawings, which help orient them to the specific place of interest. **(figure 2-13)**

These mappings can offer insight into the ways in which one finds mentally and physically in a given space. These "impromptu drawings"[100] have the ability to communicate through humanist means and intimacy. This allows the visitor to find and encounter the unknown from which this meaning is being attached. Usually, within this "scheme of orientation"[101], one has the ability to sense the landmarks of experience starting at the domicile.[102] This ability to map ones path through a series of passing instances while traversing the

93 Yi-Fu Tuan, *Space And Place: The Perspective Of Experience* (Minneapolis: University Of Minnesota Press, 1977), 35.
94 Roland Barthes, *Empire Of Signs* (New York: Hill And Wang,1982), 115.
95 Roland Barthes, *Empire Of Signs* (New York: Hill And Wang,1982), 93.
96 Roland Barthes, *Empire Of Signs* (New York: Hill And Wang,1982), 97.
97 Ibid., 97.
98 Ibid., 97.
99 Ibid., 93.
100 Roland Barthes, *Empire Of Signs* (New York: Hill And Wang,1982), 34.
101 Ibid., 33.
102 Ibid., 34.

landscape is but a phenomena that needs further attention.

The city is seen as a fragmented reality, which the social body and urban landscape are pieces of a larger whole. This disconnect can be understood through representations such as maps that allow a structuring of the city as a whole for communicating to the user. For example, Debord saw the "spatial confusion", [103] in the modern city and a inherent configuration that space takes on in a capitalistic system of modernity in the urban core, which produces and reproduces social relations in a govern state. This fragmentation of urban space and its interpretation allows for a narrative and descriptions, which the user creates and maps the location and distances of travel in a nonlinear way more as a piecing together of experience and place, that forms a montage of past experiences and imagery in a compositional gestalt.

Once someone walks the city and tries to internalize what one encounters in the everyday experience, they are a Situationist term of "dérive", which is an observer of the city and the urban settings inherent characteristics. The primary tactic that the "dérive" produces is an ability to engage with what one encounters as the gaze and a voyeuristic approach.[104] Playing the voyeur is a tactic that can challenge the social body and its representations in the built environment, which are in a hegemonic relationship with powers of obedience and regulation in the modern city.

The city as a fragmentary body of parts is observed and mapped, as a perceptual entity. Each and every user that enters into the urban fabric creates a cognitive map, to

103 Tom McDonough, Ed. *Guy Debord And The Situationist International* (Massachusetts: MIT Press, 2002), 253.

104 Ibid., 255.

2-13

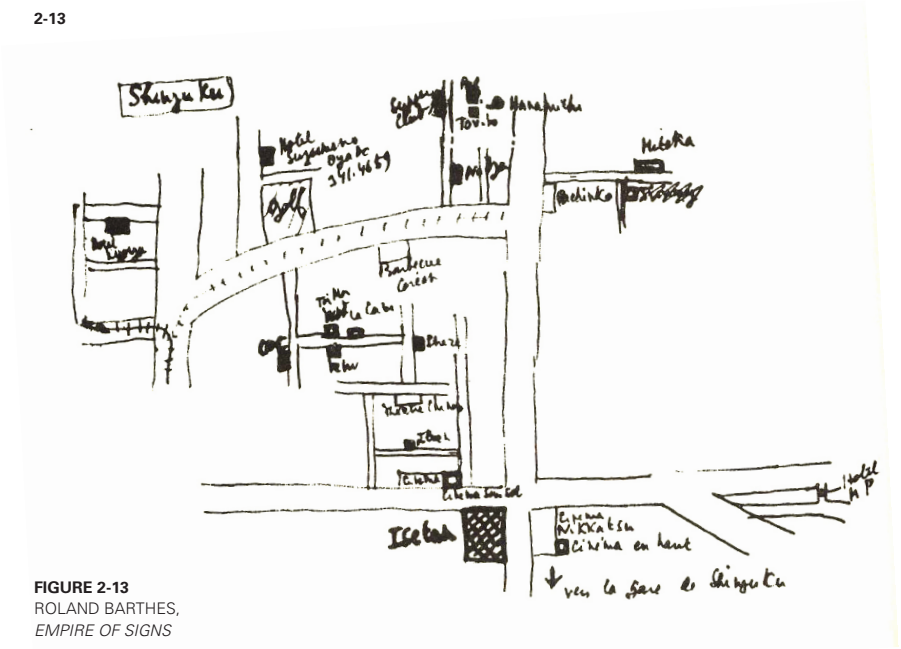

FIGURE 2-13
ROLAND BARTHES,
EMPIRE OF SIGNS

some degree. This "spatial imageability",[105] communicates distinct metaphorical relationships to the context and its observational function, yet, every representation in the built landscape can have multiple meanings to the users of the space because everyone brings to that particular instance a baggage of preconceived notions. This narrative that the user inhabits is a form of representation with what they use to inform their positioning.

2.7 ARCHITECTURE AS ORIENTATIONAL CUE

Communication in the landscape is essential for finding your way and the built environment can help in your aid as well. This architecture of styles and signs can be a guiding influence on how the user perceives the space and its interconnection to place.[106] These styles make connections with the various elements in the landscape, and are seen as parts of a greater whole. A sense of orientation was thought of evoking in the user a simple strategy, which one could find their way in a well-articulated architectural plan, but the environment has become more complex and competes for our attention. Our response to these systems that dictate our wayfinding abilities in these multimodal spaces is an "architectural triad of structure, form, and light at the service of space",[107] which gives the user a better sense of direction.

These signs or images are collections that have relationships within the society from which it was produced. This is how the

2-14

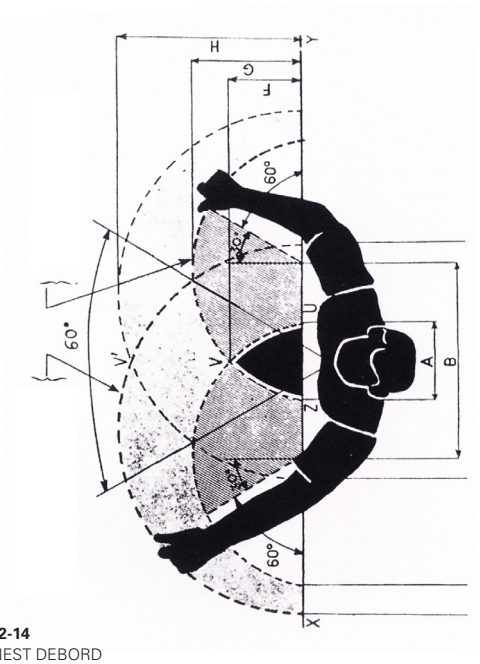

FIGURE 2-14
GUY-ERNEST DEBORD AND THE SITUATIONIST INTERNATIONAL

meaning is formed in the cognitive mind of the users as a spectacle. The spectacle is a collection of images and signs that allow the user to create social relationships that are mediated by these means to produce direction of task and perception.[108] The spectacle can be seen as a device of architectural application that has been reproduced for the communication of the landscape, and its society as visual signs of information.

2.8 DÉRIVE AS WAY-MAKER

One can way-make through various modes of traversing, such as, walking and experiencing the terrain, which the user encounters from one spatial point to the next. **(figure 2-14)** Through the observation and experience of the everyday environment one can understand the social construction of the terrain, which inhabits the site's

105 Tom McDonough, Ed. *Guy Debord And The Situationist International* (Massachusetts: Mit Press, 2002), 253.
106 Robert Venturi, D.S. Brown, S. Izenour, *Learning From Las Vegas* (Massachusetts, Mit Press, 2Nd Ed.1977), 8.
107 Ibid., 8.

108 Tom McDonough, Ed. *Guy Debord And The Situationist International* (Massachusetts: Mit Press, 2002), 254.

context with modes of perception and awareness. If one is traversing the space of the city he or she can find instances of discovery, which are unplanned and form a type of encounter with the urban site or with a place of activity. These encounters and discoveries can form "unities of atmosphere",[109] that create a "spatial localization" [110] to be mapped and understood from a tactic of analysis, that is, a dérive of movement, as a method and procedure in urban space. This tactic of way-making will involve the restructuring of the capitalistic space through critiquing its rational approach, such as, the analysis of the fragmenting space and multiple restructuring of place.

Way-making can be a tool of understanding the city and how we view ourselves within its edges. While traversing the urban fabric as a dérive, which will be a tactic of observation and practice, one can start to encounter fragments of the urban spaces as an open narrative to be read many ways. There is no fixed meaning but an unfolding narrative that takes place between the fragmentation and its fluctuating unity; for example, which a user uncovers in daily practice. **(figure 2-15)** The terrain of the city allows the walker or the dérive an ability to critique the capitalistic space. This participation is to unravel its representations and its hegemonic class relationship with the inhabitants. Indeed, the spaces, which the everyday user of the city finds oneself encountering, are merely representations of a modernist homogeneity that is fragmenting and illuminating by the walker.

2-15

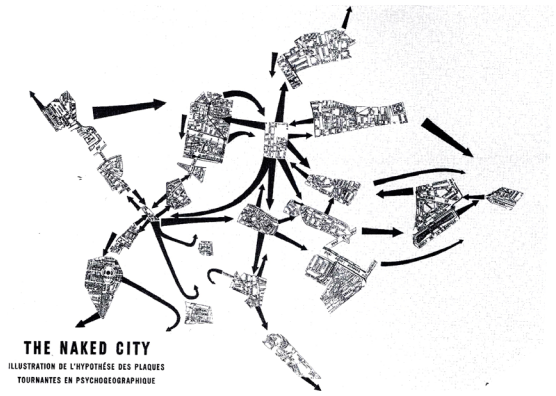

FIGURE 2-15 GUY-ERNEST DEBORD AND THE SITUATIONIST INTERNATIONAL

2.9 IMAGE OF PLACE

The image of the city is composed of many representations that are part of a narrative, which influences the user's experience of the space. Indeed, it is this overlap of images and visual cues that influence the traversing of space and place. These images or representations can be a way to internalize and read the environment for a meaningful relationship between the user and the terrain. The built form of the city carries with it connotations and denotations, which effects the user's perception of place and its urban character. Kevin Lynch's analysis suggests that form should be used to enforce meaning and not to negate it but to allow meaning to take formal qualities and characteristics. This built construction can be seen to produce meaning-

109 Tom McDonough, Ed. *Guy Debord And The Situationist International* (Massachusetts: Mit Press, 2002), 248.
110 Ibid., 248.

ful relationships to the other elements in the urban landscape, such that it embeds meaning and identity internally.

The elements that make up the city are composed of paths, edges, nodes, landmarks and gateways. These elements allow the city to be broken up into its initial parts to be analyzed and understood, so the user of the city can identify and experience the space. This can create participation on the user's part in the urban fabric that allows for a navigation and wayfinding of the city; thus, the elements of the city play a crucial role in the visualization of the urban matrix in which inhabitants interact and perceive their surroundings.

The image of the city can change and shift meaning depending on the flux of variables with in its urban matrix. Lynch suggests that the time of day, viewpoint and season can impact the communication of the city and its influence on the observer, which can alter perception and the spatial orientation. These changes are anticipated and part of the experience, to some degree within a spatial network of movement. This mental conception is dependent on the environment, it allows for fluctuating and shifting of its meaning. These 'moments' or points of desire are controlled to anticipate a mood and atmosphere for the user in the particular place within the city or on its edges. Indeed, this image of the city is developing and growing to accommodate its user in different ways;[111] nonetheless, the user is an integral part in how the city is read and valued.

There are many ways as bipedal organisms that we communicate with each other to solve problems of orientation and coordination within the society that we are embedded. For example, the coordination of the individual's society with regard to identity, age, sex, social background, group membership, emotional states and the events of the environment are features, which define our cognitive abilities.[112] These abilities are what allows use to adapt to the surroundings and understand the architectonic language of the environment. This language of the built environment and social engagement of its inhabitants or users allow for a communication, which creates meaning and function in a complex context of the city. On the other hand, the language of the city is intrinsically layered and multiple that forms nodes of participation from the user as a variable of changing meaning dependent on the surroundings from which to engage.

111 Kevin Lynch, *The Image Of The City* (Cambridge, Mass. : Technology Press, 1960), 10.

112 Donald Preziosi, *Architecture, Language, And Meaning* (New York: Mouton Publishers, 1979), 94.

conclusion

The act of wayfinding requires that the user have a terrain and a direction to traverse. This encompasses experiences of the places found and the discoveries along the way through bodily movement; thus, the instruments and tools of wayfinding is useful for the mobility of finding things in a given environment. All the paths of a terrain give direction and influence the movement towards destinations and points along a plane. This movement and traversal of space gives the traveler in a given landscape, a trajectory of course in various velocities and speeds. These modes of movement across a terrain can influence the experience and direction of thought towards a place of desire.

03
CHAPTER

THE SPATIAL MATRIX OF DESIRE

CHAPTER 03: THE SPATIAL MATRIX OF DESIRE

The spatial matrix of desire is a network of desirable points, which the traveler or tourist traverses towards, over a terrain, either physically or digitally with the guidance of wayfinding tools. Yet, before wayfinding can take place, a spatial network of points is set up for the traveler or tourist. These points create embryonic precursors with the potential of forming spatial structures, within instances of rhythm, and motility of trajectory, embedding the caprices of movement and desire. Moreover, the instruments of finding your way give the traveler a sense of direction, orientation, and destination, when using digital devices.

Most travelers to unknown places have a level of "terra incognitaness", that is, they have anticipations, and expectations about the unknowns within the destination they are moving towards. Moreover, the act of encountering the unknown, which can lead to discovery in the spatial matrix of points, creates a destination or 'moment' in time for the participant. In **figure 3-1** and **3-2**, the participant traverses a terrain and finds points of desire, either by paddle boarding in water or on a jetty projecting into the horizon, a sublime point of experience and destination.

In dense urban centers, such as cities, these spaces have multiple points in which the tourist or traveler can choose from, which they find himself or herself drawn towards for either recreation or business. The tourist anticipates these spatial points of desire in the terrain, along specific routes, to some degree. These emotions of anticipation, expectation, and reclamation inform the perception and experience of the traveler

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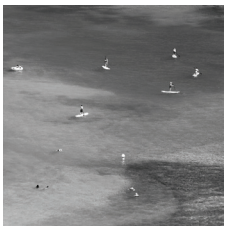

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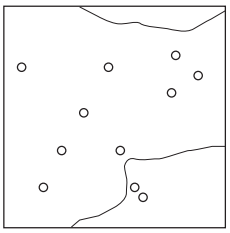

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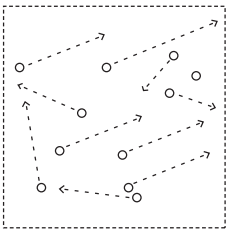

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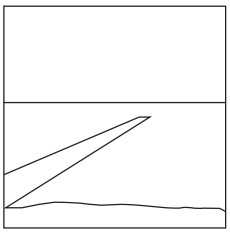

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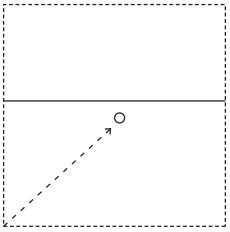


C

FIGURE 3-1, 3-2
EXPERIENTIAL MAPPINGS IN WAIKIKI (POINTS OF DESIRE IN THE FLUID TERRAIN)

when visiting known and unknown places of interest. Thus, the role of wayfinding as a tool, affords the participant or user a sense of orientation in the spatial matrix of desire, that is, in the physical, mental, and digital landscape that they inhabit.

3.1 DESIRE AND DESTINATION

The point at which an act of movement, on the part of the traveler, can become a practice, a prescription of motives and "operations" transcribed within a particular domain. This matrix of desirable points produces a trajectory that affords the traveler or tourist the ability to traverse and find. These points of destination and desire are inscriptions in the terrain for one to experience. Yet desirable points are similar to destinations because the visitor creates habitual actions of movement, directing them towards these spatial moments and points embedded within the site. Destinations differ from these desirable points of interest, a subtle binary of relation, and points in which a narrative of spontaneity takes hold of the user in a given space. In **figure 3-3**, the spatial matrix of desire is seen as a conceptual construct, creating

3-3

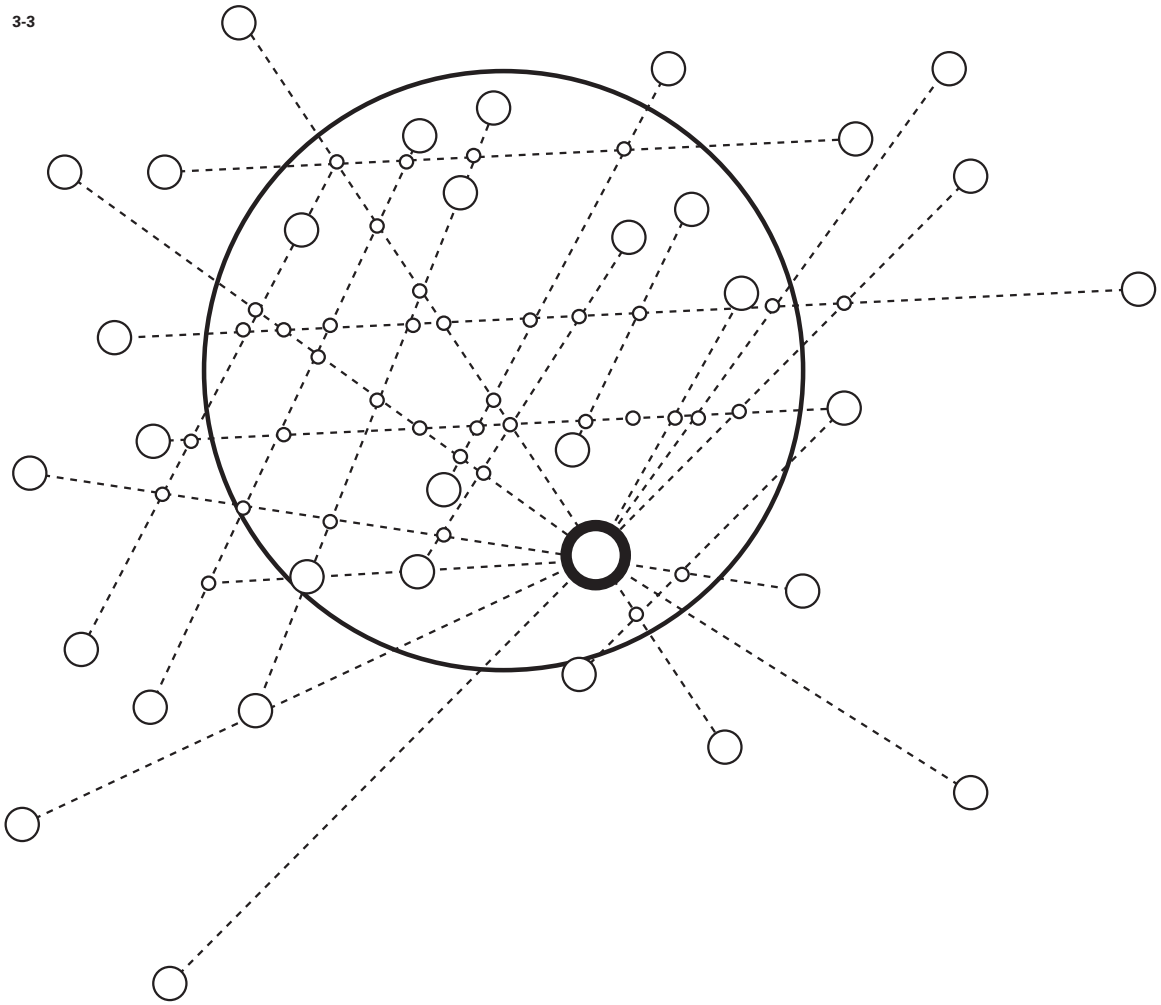


FIGURE 3-3: SPATIAL MATRIX OF DESIRE (LOCUS WITH A SCOPE OF EXPLICIT, IMPLICIT, INTERSTITIAL, AND IMPULSIVE POINTS)

points of interstitial, impulsive, and explicit destination within a site of movement. The advantageous points that give meaning to the operation of moving and finding one's way is complex and multiple, seeking out these points of pleasure and prescription are but one way to obtain a knowledge of a terrain. This spatial matrix of desire and destination affords the visitor multiple points of desire, to traverse towards and encounter. Further, the locus point from which one sets out, to discover, find, and encounter, is a practice and pattern of motility with a frame of reference.

seeking desire

Desire can come before the destination, for example, its chosen itinerary, its anticipation, and its simplification, is seen as the necessary steps leading up to departure. Desire is what propels the visitors towards these points of destination but this is not a linear sequence of events, insofar, as it is a circuitous path of trajectory, labyrinthine in nature. Points of desire are embedded in the spatial matrices, before and after the destination are found and experienced.

Seeking points of desire is an accumulation of bodily and cognitive operations, which directs the visitor towards specific positions in the terrain. This gives the participant multiple choices and encounters along the way to the chosen destination. These encounters and discoveries along the way become mini destinations or mini desires within a more explicit framework of traversing. This larger explicit network of destinations, which is seen through the wayfinding evidence (i.e., maps, brochures, travel guides, etc.) give a monumental overview of a particular site. Thus the interstitial points of desire are between the known points, however, these gaps in one's trajectory give instances of spontaneity with intervening moments of encounter.

de·sire
1. to long or hope for
2. to express a wish for

de·sir·a·ble
1. having pleasing qualities or properties
2. worth seeking or doing as advantageous

des·ti·na·tion
1. a place to which one is journeying
2. a place worthy of travel or an extended visit

seeking destination

Destinations are places that serve as points that have meaningful relationship for the user's intent. These practitioners of the urban landscape seek places that are meaningful and purposeful in their traversals of the terrain. Users traverse a terrain to find points of interest within its landscape. Indeed, these destinations can lead to encounters and discovery in an environment but can at times be distracting and disorienting.

A "cogitating mind"[119] or an imaginative flux of inspiration produces memories of far away destinations of ambient life and experience. In **figures 3-4** and **3-5**, the image on postcards represents the ideal paradise, a place of pleasure and desire. This resort town of Waikiki produces its own simulacra through the ephemera of the site, which is disseminated out for the

119 Yi-Fu Tuan, *Space And Place: The Perspective Of Experience* (Minneapolis: University Of Minnesota Press, 1977), 103.

consumer and traveler to find. The postcards signify explicit points of desire and destination, for instance, Diamond Head, Waikiki's Beaches, Hula, surfing and Moana Surfrider Hotel, which influences the visitor's anticipation of this exotic local.

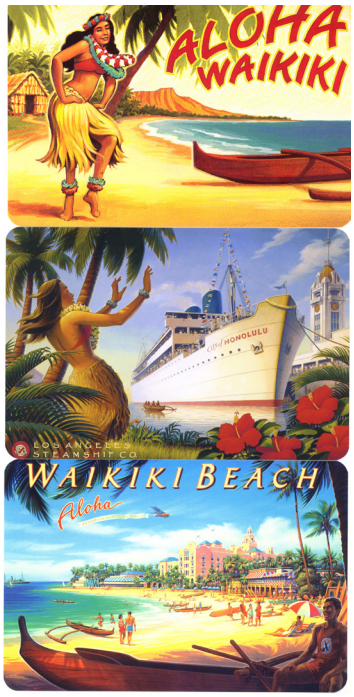
Some visitors satisfy the urge of fulfillment by moving and traversing great or short distances. In resort towns these destinations are goals in themselves, with key characteristics that motivate the visitor in finding unique experiences of place, which can lead to discovery. Destinations are goals that allow people to orient themselves in relation to their surroundings while aspiring to something greater then the mere present.

3.2 SPATIAL MATRICES

These spatial matrices of points come before the physical act of traversing the terrain toward your destination. They are embedded in the tools of wayfinding: the guidebooks, consumer maps, road maps, and mobile applications. This spatial matrix of desire for the tourist or traveler precedes the act of wayfinding, however, it is embedded within the tools and act of traversing the terrain mentally, physically, or digitally.

Matrices, an array of connections and trajectories in which the user or visitor traverses while spatially interacting with points of interest, along a path. This is on the surface, that is, explicit points of desire, which are embedded in a larger known route of itinerary. An "ensemble

3-4



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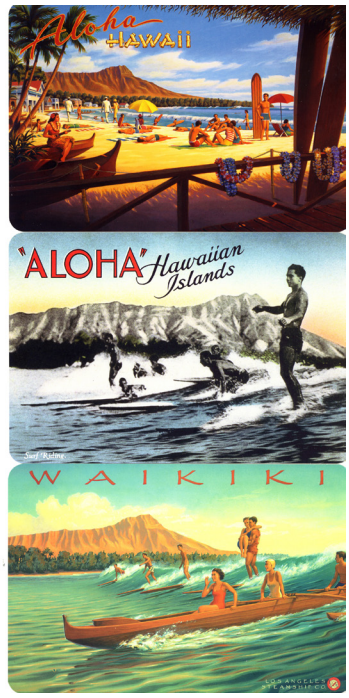


FIGURE 3-4, 3-5
POSTCARDS:
IMAGES OF WAIKIKI AND DIAMOND HEAD:
EXPLCIT POINTS OF DESIRE, KNOWN DESTINATIONS

of interstices" [120] one uncovers and finds within a lattice of motility. Moreover, this spatial network that works in the interstitial spaces as well as the more dominant or explicit of places can exhibit these features of desire and impulse.

3.3 LAYERS OF EXPECTATION

The layers of spatial points and experiences are multiple, within this spatial matrix of desire the visitor can find, discover, and encounter things that were previously unknown. This network of connections forms an act of finding, and a manifestation of desirable points. These spatial points create a network of movements and operations by the user and traveler in space; for instance, specific types are seen to be explicit, implicit, impulsive, and interstitial. Or rather, a topology of points that is continuous throughout the terrain that configures the expectations of the participant as they traverse. In **figure 3-6**, the pedestrian is traversing through space on a terrain of multiple destinations.

explicit points

The points that are known and revealed through ephemeral artifacts (i.e. maps, brochures, travel guides, etc.) describe specific locations and destinations within a given terrain. These points of expectation are explicit and create an over arching framework of monumental scale, a layer of specificity of desire and destination for the visitor to traverse and find.

implicit points

These points of desire configure space in relation to other points, localization of place, but only in correspondence with other positions of desire. A moment of encounter and discovery within a trajectory

120 Michel De Certeau, *The Practice Of Everyday Life* (Berkeley: University Of California Press, 1984), 128.

3-6

FIGURE 3-6
WAIKIKI IMAGE: BEACH WALK

of movement, usually towards a destination while having an itinerary, but that is not always the case, such as the points of implicit desire because they give interstitial experience to the participant.

impulsive points
These impulsive points in topological space form a continuous rhythm that the participants traverse and uncover. It is a configuration of movements and operations, which allows visitors to encounter positions of spontaneity and impulse within a given terrain. One comes upon the point or instant with curiosity and wonder; however, it's an instantaneous compulsion of desire and drive.

interstitial points
The points in between or in the gaps of interstitial space create wonder and encounter for the visitors, when experiencing an unknown terrain for the first, second, or even third time. Positions of interstices give rise to experiences that are not yet understood or even mapped, that is, they have a level of "terra incognitaness".

3.4 SPATIAL RELATIONSHIPS

Spatial involvement requires the body to move on paths that direct the action toward points of interest, which, of course, the user provides. These itineraries or maps of departure and arrival, give the user an aid to finding their destination.

Traversing Waikiki is an experience of wandering that entails encountering and discovering points of interest, which informs the visitors of their whereabouts and locations. The notion of place encapsulates this space into a form that, in Waikiki's case, is a singularity of experience within a destination or terminus, which anchors and attaches a signification of trajectory. These points of interest and purpose are meaningful for traversing and moving through space on a given path. Indeed, these visual and mental cues in trajectory form at various velocities within the different modes of wayfinding.

How has space and it's traversing at various speeds been understood in Waikiki, which is, the articulation of movement within a set parameter? This construction can be seen at various stages of movement as ways to find destinations that matter to the participant or walker of the urban environment. Each point of movement can be an extension and an intention on the part of the user of the cities fabric. Experiencing these points or "pauses"[121], the built landscape can facilitate the exchange of messages and imagery which enforce these signs as a means to discovery and encounter for the enjoyment of the observer or voyeur of the urban movement.

move·ment
1. the act or process of moving
2. change of place or position or posture
3. a series of organized activities working toward an objective

movement
The user orients oneself in Waikiki while traversing the resort town that they have come to enjoy and experience. Every visitor here has to find their way through a terrain of experiences, which can be encounters that create memories of place. While tra-

121 Yi-Fu Tuan, *Space And Place: The Perspective Of Experience* (Minneapolis: University Of Minnesota Press, 1977), 6.

versing the tropical resort town, the user has to come to terms with their surroundings in order to make sense of it for later reference. For instance, when we start to formalize a visual representation of the moment in contemplation or "pause", [122] we create a point in experiential time that we use for choosing paths and making meaningful relationships.

The user or visitor has to make sense of their surroundings while traversing the urban landscape. They do this by creating relationships with the environment and spaces that inhabit it while becoming embedded while observing and participating. These streams of consciousness in time allow for a fluid movement of idea and manifestation to take root and connect to a web of experience and destination. Indeed, every participant in the urban matrix of Waikiki experiences these destinations that can be found to create memory and meaning, even if they are unaware of it. In **figure 3-7**, the user has found a point of desire that affords them relaxation and comfort.

space
1. a boundless three-dimensional extent in which objects and events occur and have relative position and direction

place
1. an appropriate moment or point
2. a distinct condition, position, or state of mind

pausing

This notion of a "pause"[123] or a moment in time which the user experiences and triggers a response for determining paths. A trajectory of movement along a path, which requires a destination depending on cues from the environment and experience of the terrain, they have found themselves. These instances of reflection and memory, aid in destination finding, that is, in Waikiki for instance because of the many visual cues that orient the user for finding and encountering. Sometimes there is confusion and disorientation within the experience of spatial movement, which needs to be understood, analyzed, and compared to other parts of wayfinding communication.

Each fleeting moment of traversing the terrain allows for articulation of movement to take place. Through the physical mobility of the user in the urban environment the steps taken and time passage can trigger memories of destinations and

3-7

FIGURE 3-7 WAIKIKI IMAGE: SUNBATHER

122 Yi-Fu Tuan, *Space And Place: The Perspective Of Experience* (Minneapolis: University Of Minnesota Press, 1977), 6.
123 Ibid., 6.

events. The distance that the user traverses encompasses many points of orientation and visual orientation. A "pause"[124] in time allows for many directions to be taken in a wayfinding schemata that the receiver represents in his or her cognitive mind. These moments can be triggers in the urban landscape, which guides the user's navigation of the terrain while traversing at various velocities.

orientation

Human beings are creatures of amazing ability when it comes to reaching goals and destinations of interest. Especially in the urban setting the inhabitant tends to use visual cues in the environment to help orient them towards a particular result. The users and visitors in Waikiki use many instruments to allow them to find their way; such as brochures, maps, signs and informational devices. Also, this tropical resort town has many kiosks in the hotels on the beach or on the path that follows the shoreline. Information is abundant there but sometimes it can be an overload, which can bring anxiety and frustration when lost; other times they can bring about encounters.

en·coun·ter
1. to come upon
2. experience especially unexpectedly

encountering

As one traverses the terrain of Waikiki they come upon things through a direction of sign. These signs direct the users movement along paths that lead to objectives or places of interests. Most of the maps and evidence found in Waikiki gives a representation of directions and points of desire. For instance, these signs are embedded in the circulation and mobility of the user; the terrain, with its intricate matrix of paths and nodes, allows for encounters to take place. Situations and points of impulse occur along this path that entails movement and time, a transition within space towards a place of experience for the user.

memory

The city can only be understood through an "ethnographic kind"[125] which is through observation that Barth suggests, such as walking, seeing, and inhabiting a space. This could reference the notion of experience, which is transitioning from one place to another while traversing the urban domicile. The spatial experience can be a way in which one starts to piece together instances that form in the past to orient oneself in the present and future, rather than finding irretrievable or unrecoverable destinations of anxiety. In addition, memory serves as a way to negotiate the past for better understanding of the future choices that help in patterning the built environment for better readability.

Do these trajectories have destinations or encounters, which bring about discovery and accidental meetings? Mapping out these trajectories can help in understanding the site and how it impacts the users sense of way-making. If so, does the user or walker of the city have a plan for traversing the space? If indeed they have a cognitive ability then how is the city determining these trajectories, which are made up of

124 Yi-Fu Tuan, *Space And Place: The Perspective Of Experience* (Minneapolis: University Of Minnesota Press, 1977), 6.

125 Roland Barthes, *Empire Of Signs* (New York: Hill And Wang,1982), 36.

various modes of traversing space? For example, mechanical means of movement such as bike and automobile, can allow for encounters and discoveries in a state of transition and flux at various velocities. The city can be this generative place of accidental meetings and discoveries, which the user uncovers and reveals.

way·make·ing
1. creating points of desire along a path by traversing, either mentally, physically, or digitally

way·los·ing
1. becoming disoriented while traversing the terrain towards a point of interest

Can a map be drawn from an analysis of way-making and way-losing? If so, can an urban design come from this method, as a means of organizing space for a generative outcome in discovery and encounter? This may give a usable way for a visitor to encounter and find their way through the terrain. It could entail the traveler traversing and discovering along the way to their specific destination.

3.5 KNOWING THE TERRAIN

The landscape of a site can become familiar once the user experiences it and traverses the terrain with a destination in mind. Knowing the terrain can give a sense of orientation and a familiarization that helps in traversing and setting courses of movement. These trajectories are made possible through mappings found on site and visual cues of the environment, which help directing oneself on paths toward a place of desire.

ter·rain
1. the physical features of a tract of land
2. a geographic area

multiple terrains

Signs consume our mental, physical, and digital landscapes. They give the user a sense of regularity and familiarity, which allows the place to be understood for its continual use. These terrains of the physical, mental, and digital rely on the user's ability of finding their way to a specific goals and destinations. Travel guides and digital devices are similar because the technology affords the user the ability to find their origin and to map out a route that is most desirable. Both mediums convey information that can influence the perception of place and space to this specific point of desire, a distortion of reality and reduction of form and content, that is an ability to consolidate information metaphorically in the mind.

When tourists navigate the terrain of Waikiki, the majority of them use some sort of map either digital or ephemeral. The digital affords the user up-to-the-minute information but with printed maps or brochures one can only hope for current information. Many of the participants in the survey use digital devices for finding and orienting themselves in Waikiki's tropical terrain. Perhaps most importantly, the traveler "enumerates the various landmarks",[126] that is, they differentiate the environment into cues of direction and orientation, a simple way of coordinating bodily and mechanical momentum towards specific destinations.

There tend to be many correlations between the mind and mapping the landscape, when one moves through space,

126 Romedi Passini, *Wayfinding In Architecture* (New York: Van Nostrand Reinhold, 1984), 28.

their senses are stimulated and navigation becomes an act of following given signs. These signs tend to give the traveler points of departure or direction, such as the regulatory signs of consumption and movement, which give a reasoning for traversing and finding the way. Waikiki's terrain allows the tourist or resident to find the way by using their five senses, which gives people the ability of traversing the terrain. The senses are what allow people the ability to find, orient, direct, and move through spatial environments. Our sense of orientation and direction comes from the environment of geometries and representation, a landscape of signs that communicates to the user specific codes, and regulations that are dominate, even if the user is unconscious of it.

The physical, digital, and mental terrains are representations, which create an image that allows the user to anchor meaning and relation to the spatial environment. But this meaning is in a state of change and fluctuation, thus, communicating differently, depending on the observer's perception. In most cases, through the use of sign, either three dimensionally–built form, or two dimensionally–graphic form, an action in persuasion by the user, gives directionality to the terrain.

mental-terrain

This perception and experience in the mind, while traversing, is a metaphorical landscape of human nature. The eternal reality of the individual as projecting through physical and intellectual space is a response from the mind as it imagines the domain of existence. Using the given human senses that shape our perception, the physical and biological conditions of seeing, hearing, tasting, and touching, create signs of meaningful relation, throughout the built and mental

3-8

FIGURE 3-8
WAIKIKI IMAGE: PATH THAT JETS OUT INTO THE WATER

landscape. The directions and orientational cues to find specific points in space are mental representations that are distortions and non-Euclidean, such that, they are in the mind, a mental representation of which there are no physical dimensions. In **figure 3-8,** the path jets off into the water, allowing the user to be physically and mentally projected on a path.

physical-terrain
A material existence that occupies space and takes on place, and differentiates, combines, and opposes the separate parts making up Waikiki, triggers in the user an interest of movement along a path. Each path in the landscape is a direction and a potential for destination finding. Most of these material parts in the terrain are inherent to the site; for example, Diamond Head as a landmark, site's orientation to the sun, elevation changes when traversing, and the water's edge, informs the traveler of their point in space. However, there are constant interchanges and stops along the way, which the tourist and traveler anticipate or expect in a traversal of the terrain. In **figure 3-9** and **3-10**, the inhabitants traverse the streetscape to arrive at multiple points of desire. This landscape of form, mass, and distance, a geographic terrain, which embeds points that give meaning to the physical realm that one inhabits.

digital-terrain
Digital-terrain is a technological landscape that relies on the human sensibilities, such as seeing, hearing, and touching to understand its virtual, its materiality, its connection, and its use. The binary paths of movement and nodal connection within a virtual

3-9

3-10

FIGURE 3-9, 3-10 WAIKIKI IMAGE: PEDESTRIAN STOP AND TRAVERSAL

matrix gives the user control over their terrain in order to manipulate it, distort it, simplify it, replicate it, and eventually communicate it. Moreover, the user tends to forward, receive, and store information for navigational purposes, either in digital or physical terrains.

conclusion

Once the traveler arrives in Waikiki, they set up a pattern of movement with habitual activities. These practices, to some extent, lead to finding, discovering and establishing multiple sites of interest within an area of enclosure. This enclosure or domain becomes the terrain in which the traveler or user finds himself or herself navigating. In Waikiki, the participant is actively engaging in their surroundings through a perceptual tool kit of senses, thus cognitively creating and forming an image of their environment. These spatial relations that form between the place one inhabits and mental representations that one imagines, interlaces within a matrix of desire. An intertwining of perceptual states and cognitive ability, enable, define, and produce bodily activity of movement. We will return to this notion of constructing spatial matrices through the analysis of ephemeral evidence, such as maps, images, and surveying travelers of this tropical destination.

04
CHAPTER

WAIKĪKĪ AS DESTINATION

CHAPTER 04: WAIKIKI AS DESTINATION

Waikiki (Spouting Water) is a destination for many tourists and travelers in the island of Oahu. This tropical destination creates an image in the mind of the traveler, which allows them a way to engage when arriving here. The tourists and travelers to Waikiki rivals some of the highest dense cities on Earth, which requires multiple modes of traversing and finding points of desire in the built landscape. This requires tools of wayfinding for the tourist and traveler such as the consumer maps, road maps, and travel guides. These maps that were collected, affords the visitor the ability of traversing and finding the way in a spatial matrix of desire. Indeed, the visitor brings anticipation, expectation, and reclamation, which contributes the their sense of direction and insight.

4.1 ARRIVING IN WAIKIKI

When tourists arrive in Waikiki they have to find a place to stay such as a hotel. The hotel is a home away from home that allows the tourist to set up practices and routines, and allows them to familiarize themselves with the terrain's physical characteristics. These practices entail traversing the terrain and finding destinations and objects of desire while staying in this temporary place or surrogate home. For example, in **figure 4.1**, these hotels become surrogate homes or locus points, which represent specific destinations and points along a route of movement, explicitly conveying to the visitor. This consumer map informs the visitor of the points of leisure along Waikiki's strip. It allows the traveler or tourist the time to orient and find their way toward specific goals in the landscape while encountering

4-1

FIGURE 4-1 CONSUMER MAP: WAIKIKI: WALKING MAP, EXPLICIT POINTS OF DESTINATION IN THE BUILT LANDSCAPE

and discovering things along the way. For example, way-making creates these points of interest along the path that one traverses while encountering impulses of desire.

Waikiki is a popular destination for the tourist and traveler to Oahu. This sandy strip is twenty-one degrees north of the equator, and stretches two and a half miles from Hilton Hawaiian Village on one end to Kapiolani Park and Diamond Head on the other.[113] It is separated from Honolulu on the northern boarder by the Ala Wai Canal, which positions it three and a half miles from downtown Honolulu, thus creating a destination that borders or cradles the water's edge on both sides; the Ala Wai canal on the northern side and the Pacific Ocean on the southern side. This allows the traveler to be directed towards points of interest while between two bodies of water on either side along the pedestrian edges. The pedestrian paths on both sides of Waikiki afford the user or visitor a means of traversal. This enables a mental mapping to take place by capturing images of the surrounding seascape of beaches and mountain views of Diamond Head. These places in Waikiki can create visual and cognitive anchors for the user of the city to find their way along a path of movement. For example, Waikiki is made up of seven beaches: Duke Kahanamoku Beach, Ft. DeRussey Beach, Gray's Beach, Kahaloa and Ulukou Beaches, Kuhio Beach Park, Queen's Surf, and Sans Souci. **(figure 4-2)** These beaches are subtly unique, and have specific differences in views and formations along the water's edge. Most of the beaches that are specific to Waikiki create points of destination within this sandy strip experience.

113 *Fodor's Waikiki* (New York: Fodor's Travel Publications, 1992), 52.

4-2

FIGURE 4-2 CONSUMER MAP: SHOPPING AND BEACHES, EXPLICIT POINTS OF DESIRE

This sandy strip caters to an abundance of visitors that traverse and experience its unique space, made up of various shops, restaurants, and hotels, while taking in the sublime view of the water's edge on the northern side. Waikiki covers an area of seven-tenths of a square mile, which at a good pace, enables one to walk in about 15 minutes. [114] At this walking pace one can experience the site much different than mechanically traversing, such as bicycle, automobile, or trolley because walking enables one to move in a rhythm that the human senses can absorb and articulate space. The articulation of spatial movement can inform the five senses of human perception: sight, smell, touch, taste and hearing. These senses stimulate and give the user a reason to move along different destinations that they encounter, which affords one to create and manifest mental mappings of their surroundings. Indeed, the sandy strip of Waikiki has many triggers that inform the visitor's perception that allow them to cognitively map their surroundings, however, each participant has a unique perceptual toolkit to find their way to multiple points of interest.

Each person carries metaphorical baggage, a compilation of unique perceptions that inform their experience of movement in space. A mental construct of habitability informs the cultural, experiential, and motivational momentum towards various destinations of interest in any given site.

Waikiki as a destination of leisure for the tourist is seen through its anticipation of exotic splendors, which can only become a realization through interpretation and experience of the site. For instance, Waikiki caters to about 110,000 people that crowd its beaches and boulevards, making it one of the most densely populated areas on the planet.[115] An extreme amount of visitors to a location requires a system of traversing the terrain to find these points of destination. Because without a wayfinding system of some kind that orients the user to specific points along the way, one can become lost and disoriented. In these highly dense urban environments, one can encounter new systems of traversing, which inform their experience of space while drifting and negotiating through the spatial terrain of habitation.

Does the physical act of moving by the tourist or traveler require a system of finding? If so, is there a need for discovery and encountering in the spatial matrix? This may allow the tourist ways to experience and perceive the terrain as a mode of "drifting"[116], which affords the user of the urban landscape an ability to encounter points of spontaneity. Moreover, an instant of trajectory, that is, a fluctuation in movement will allow for specific points and departures along the path; even an unknown directional cue can produce this departure therefore, leading to these instances of insight and wonder.

How does one wayfind in Waikiki? The tourist or user of the terrain finds his or her way by investigating the terrain for

114 Robert Nilsen, *Hawaii: The All-Island Guide* (Emeryville, Calif: Avalon Travel, 2001), 845.

115 Robert Nilsen, *Hawaii: The All-Island Guide* (Emeryville, Calif: Avalon Travel, 2001), 845.

116 Simon Sadler, *The Situationist City* (Cambridge Mass: MIT Press, 1998), 93.

visual cues that give a direction towards a destination of choice. These destinations embed points in space and create places within the terrain, which the user traverses to pinpoint with the aid of wayfinding instruments and tools. Consumer mappings of Waikiki direct the visitor to the hotels and points of leisure. They offer a representation of Waikiki's walking terrain, but leaving out other destinations. Yet in **figure 4.3**, this consumer map reveals a more complex arrangement of spatial elements with a distressed look, that is, the graphic representation is illustrative and hand done to some extent. It becomes a bit confusing because of its use of color, typography, and form. It can be simplified for communication purposes, such as, the Waikiki Walking Map, in its simplification of form versus content. **(figure 4-1)**

In Waikiki the tourist can traverse the landscape or terrain, to find points of interest while at the same time experiencing encounters along the way. This direction of movement when moving on a trajectory can become confusing and may lead to unpredictable results in Waikiki's terrain. These maps of consumption give direction to possible points of explicit desire, which include hotels, restaurants, stores, bars, beaches, and cultural points. In **figure 4-4**, these explicit points are seen and understood from a visitor's perception of the site, which persuade their movements and points of destination; nevertheless, allowing the tourist and traveler a more monumental view of Waikiki, seen from its interstitial parts, to its wholeness as a tourist destination.

4-3

FIGURE 4-3: CONSUMER MAP: EXPLORE WAIKIKI MAP: EXPLICIT POINTS OF DESTINATION FOR THE TOURIST AND TRAVELER

trav·el·er
1. one that travels
2. one that goes on a trip or journey

tour·ist
1. a person who is traveling, especially for pleasure.

4.2 TOURIST ECOLOGY

Most ecological niches are seen through close observation; for example, the visitors are seekers of destination and encounter within a spatial matrix. This spatial network of signs, points, and movement creates the narrative for traversing the terrain. The tourist has an itinerary of leisure and discovery to reclaim while the maps are found to curtail the experience and direction through the wayfinding tools.

How are the visitors seeking and discovering spatial experiences from one point to the next? Through a series of "sensorial sensations"[117] or spatial signifiers the visitor perceives their surroundings. The sensory cues make up the walls, light, and space; however, they are only part of the spatial syntax of desire. Each and every individual brings their own baggage of culture and experience to the site in which they find themselves traversing and searching. In **figure 4-5**, the directional arrows give direction for different velocities of movement such as mechanical as well as bodily. The city tends to flow into the water, creating a terrain of fluid with points of impulse and desire.

The visitors' habitation of specific destinations comes with anticipation. This affords the tourist or visitor a degree of expectation because they have an itinerary and a strategy to get them to their point of desire,

4-4

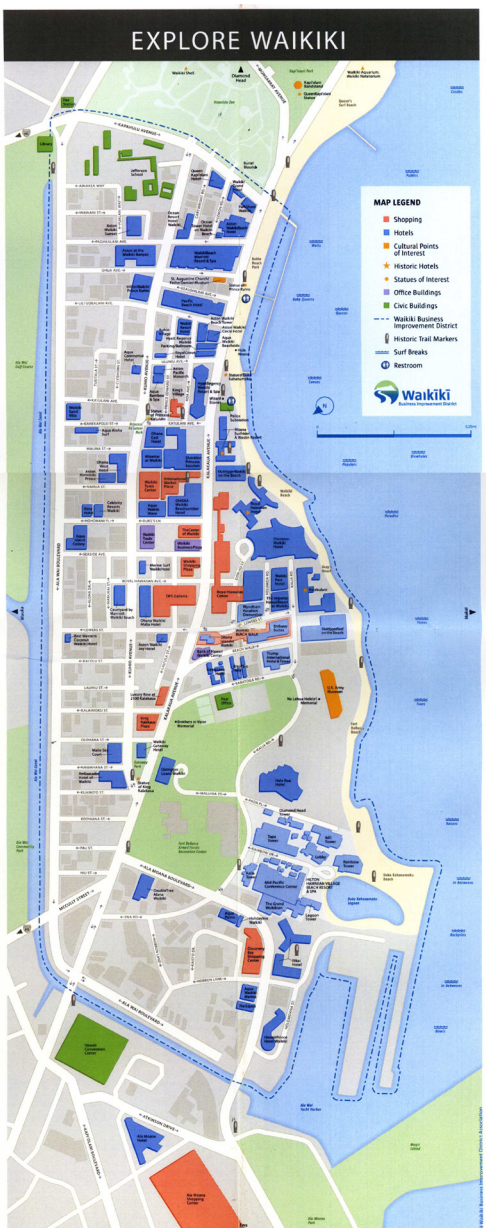


FIGURE 4-4: CONSUMER MAP: EXPLORE WAIKIKI MAP: EXPLICIT POINTS OF DESIRE AND DESTINATION SUCH AS HOTELS, SHOPPING, STATUES, HISTORICAL SITES, AND BEACHES

117 Le Corbusier, and Frederick Etchells, *Towards A New Architecture* (London: Architectural Press, 1946), 187.

which allows them to reclaim or occupy the space, a point of reclamation. Thus visitors become a niche in the spatial matrix of desire; they are mobile points in which interaction, movement, and finding take place. These participants are in a constant flux of moving and discovering within the terrain of Waikiki, quite different then the resident with slow simmering anticipation. The tourist or traveler comes to a destination, such as Waikiki and sets up a practice of seeking, finding, encountering, and traversing within a spatial matrix of desire.

What kinds of evidence of wayfinding are seen in Waikiki? This evidence of wayfinding is in the tools, such as maps and brochures, which afford the tourist a choice of direction and point of desire in Waikiki's terrain. These wayfinding tools can be categorized into guidebooks, consumer maps, road maps, and applications for mobile digital devices such as the IPhone, PDA, or any other portable digital device. Another example and tool in wayfinding are the signs that direct the tourist or traveler towards their destination and point of interest. By traversing a landscape or terrain the wayfinder or tourist can move and make choices through the progression of spatial temporalities that one encounters.

4.3 TOOLS OF WAYFINDING

The traversal of space across a terrain is fundamental to wayfinding. Each one of the transient users or travelers to a site, such as Waikiki, need to orient themselves by using the maps and brochures found there. The bodily movement of the traveler while en route to a destination is designed in such a way to control views and the experience. The traveler has control over what they want and desire in the landscape but spatial influences can

4-5

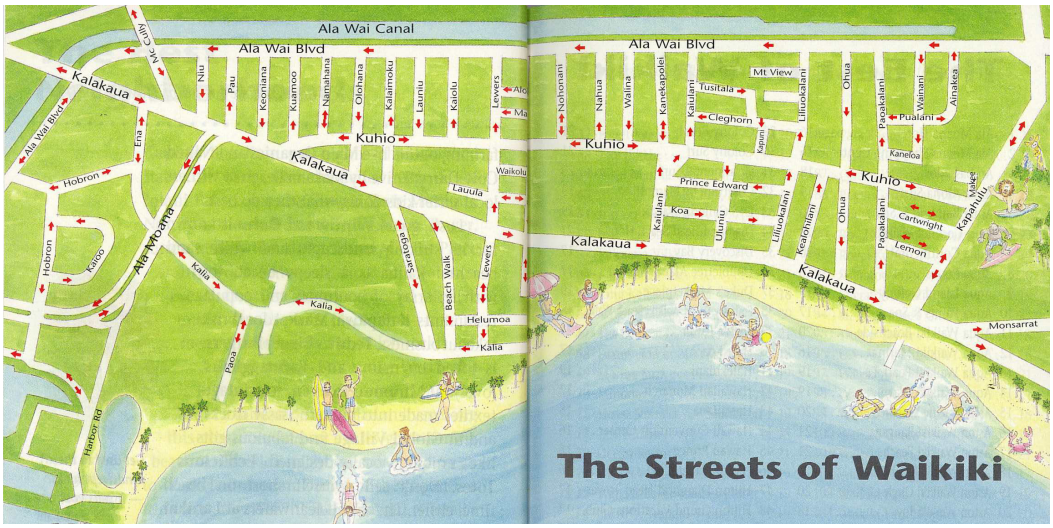


FIGURE 4-5: ROAD MAP:THE STREETS OF WAIKIKI TRAVEL BROCHURE: MECHANICAL MODES OF MOVEMENT (AUTOMOBILES, TROLLEY, BUS) AND BODILY MOVEMENT (SWIMMING, SURFING, SNORKELING)

challenge their sense of direction. Maps and brochures aid in orienting the traveler by giving them direction in an unfamiliar place. These instruments of wayfinding can guide and create practices of traversing the terrain, even to the point that the notion of 'home' becomes mobile and transportive. Moreover, the user's ritualization practices embed a sense of familiarity and habitual action.

consumer maps

In Waikiki, the mappings that explicitly target the tourists and travelers are seen in the form of brochures, folding maps, magazines, and small books. The consumer maps are geared towards a specific demographic within this resort destination, which is also considered a neighborhood of Honolulu. Yet the consumption, in Waikiki, is informed by these mappings, while affording the traveler the option of choosing from these desirable points interest. They have the choice of path, direction, and destination, but the purpose of these mappings is to work in a capitalistic framework of consumption. In **figure 4-6**, this consumer map tells a narrative or story in which the explicit points of desire are representations in a cartoonistic world. Waikiki becomes a fantasy or simulacra of spatial points that the tourist or traveler explores and uncovers.

For instance, the tourist's recreational time is spent exploring the terrain that these consumer maps help create and set up, but these systems of controlling the tourist's movement through commercial objectives tends to limit the spatial interaction. A spatial matrix of points is created explicit in content and form; furthermore, these spatial points of desire communicate information to the traveler or traverser, which curtail and influence their perception and movement, which exploits their exploration from one point to the next.

4-6

FIGURE 4-6: CONSUMER MAP: CARTOONISTIC WORLD, EXPLICIT POINTS OF DESIRE (HOTELS, RESTAURANTS, PARK, ZOO, BEACHES)

brochures and maps

Some of Waikiki's wayfinding evidence, such as the brochures and maps aid the tourist and traveler in their journey through the terrain, an advantage of planning a route and destination. These ephemeral artifacts are short narratives of expectation and desire that produces a response in the mind of the traveler. Most brochures are either illustrative in form or diagrammatic in representation that communicates at different scales of proportion. This information gives the traveler an orientation and bearing on their position relative to their terrain and destination along a path of trajectory. These signifiers of communication and representation give a directional narrative to follow. In **figure 4-7**, the map communicates through its use of color and its partitioning, creating regions and edge conditions for the tourist or traveler to traverse. These explicit points of desire are seen as edge conditions and regions within Waikiki.

A map is a representation of the terrain, an approximation at best, which gives the traveler useful information about the environment for his or her traversal toward points of desire. This graphic representation through visual form and hierarchies of typographic meaning conveys explicit messages of the landscape. These mappings of the terrain for the users movement are possible because of their mobility. Travelers are spatially aware, which affords them an acute sense of discovery and expectation. In **figure 4-8, to 4-13**, the consumer maps of Waikiki, tell multiple narratives of traversal and points of

4-7

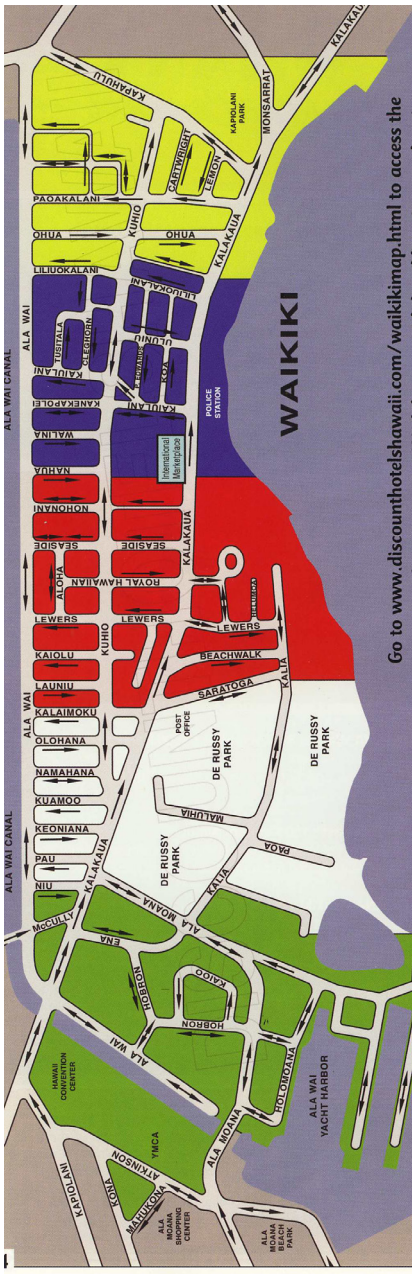
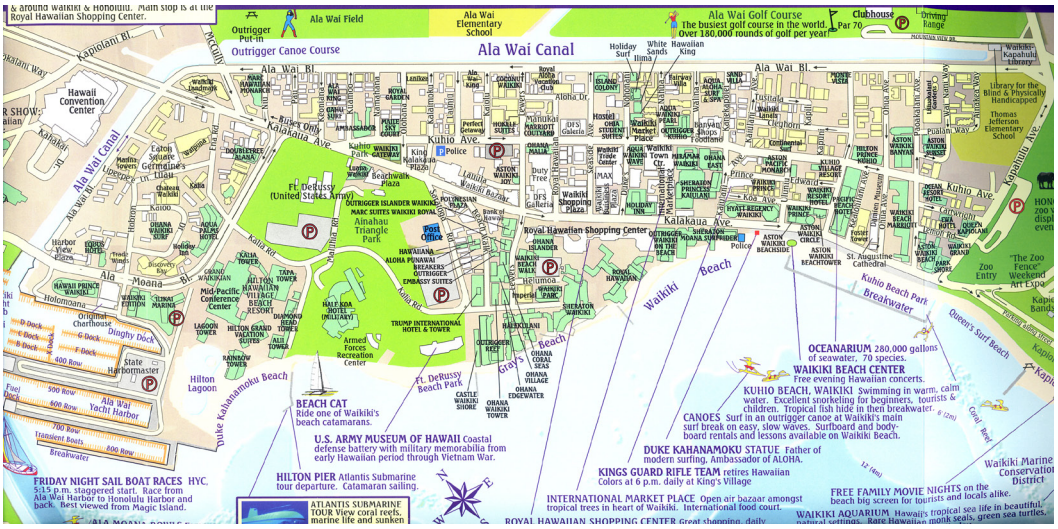


FIGURE 4-7: CONSUMER MAP: EXPLICIT POINTS OF DESIRE AS EDGE CONDITIONS AND REGIONS: COLOR CODING

4-8



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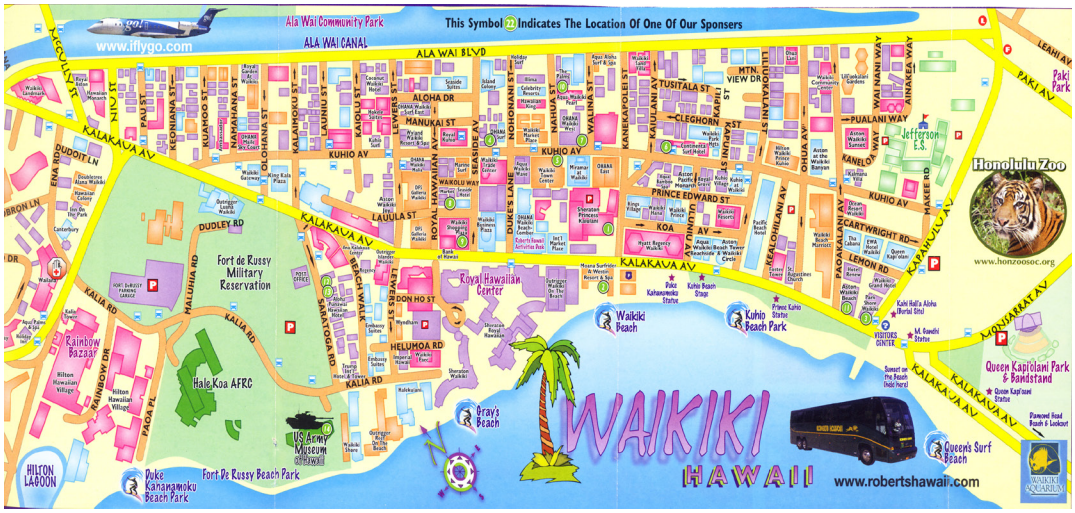

FIGURE 4-8 CONSUMER MAP: EXPLICIT POINTS (HOTELS, BEACHES, SURF SPOTS)
FIGURE 4-9 CONSUMER MAP: OAHU GOLD: EXPLICIT POINTS (ZOO, HOTELS, BEACHES, RESTAURANTS)
FIGURE 4-10 CONSUMER MAP: WAIKIKI HAWAII: EXPLICIT POINTS (ZOO, HOTELS, HILTON LAGOON)

4-11

4-12

4-13

FIGURE 4-11 CONSUMER MAP: KOREAN TOURIST MAP: EXPLICIT POINTS OF DESIRE (HOTELS, BUS OR TROLLEY STOPS, SHOPPING, GALLERIES)
FIGURE 4-12 CONSUMER MAP: JAPANESE TOURIST MAP: EXPLICIT POINTS (HOTELS, RESORTS, SPAS, BUS STOPS, ZOO)
FIGURE 4-13 CONSUMER MAP: KOREAN TOURIST MAP: EXPLICIT POINTS (HOTELS, MUSEUMS, RESTAURANTS)

desire with different graphic styles. These maps and brochures curtail movement and direction to specific or explicit points in Waikiki's spatial matrix.

road maps

This type of map gives the traveler an idea of the circulatory pattern within a destination. For instance, the mechanical movements of bicycles, automobiles, trollies, and buses are understood through these maps. In **figure 4-14**, an ephemeral ticket that is given when one traverses by bus is seen as evidence of this mechanical means of movement in a terrain. The traveler uses the road map as a guide to destinations while the routes or paths direct the movement at different velocities and speeds. In **figure 4-18**, the Waikiki trolley ticket is an ephemeral artifact, a pass from a journey of movement and experience of the terrain.

4.4 MODES OF CIRCULATION AND DISPERSAL

The mechanical modes of movement, such as automobiles, buses, trolleys and helicopters are seen in Waikiki as a means of transportation. In **figure 4-15** to **4-17**, these road maps or mechanical movements along routes to specific points in a spatial matrix are creating itineraries for the participants and users. These modes of traversing space and the terrain create specific perspectives and mental images, which can take place in the user's cognitive mind.

In Waikiki the majority of the travelers traverse on foot while depending on trolleys, buses, taxies, and cars less frequently. Walking was the primary mode of travel for most of the participants in the study. The primary streets that encourage visitor

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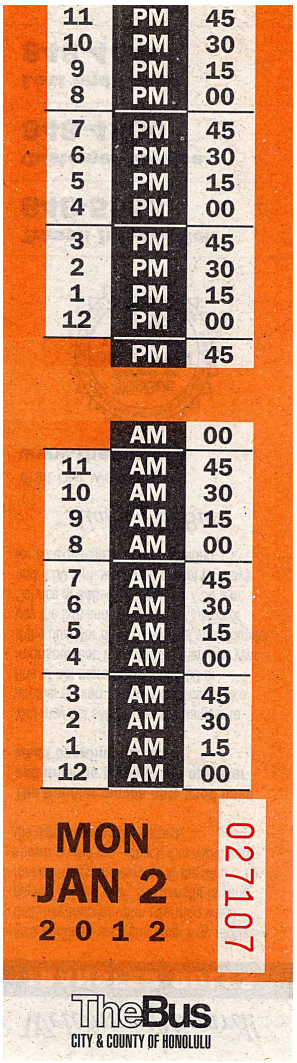

FIGURE 4-14: BUS TICKET: EPHEMERAL EVIDENCE

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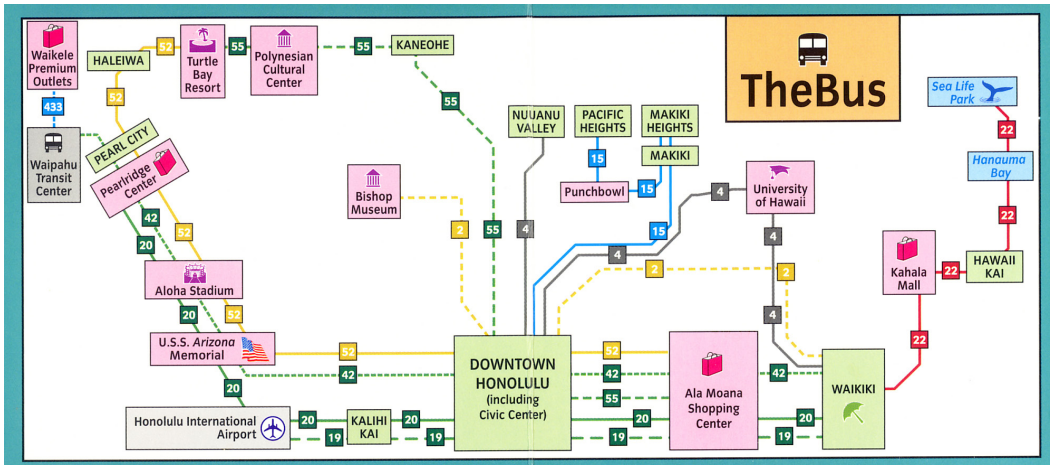

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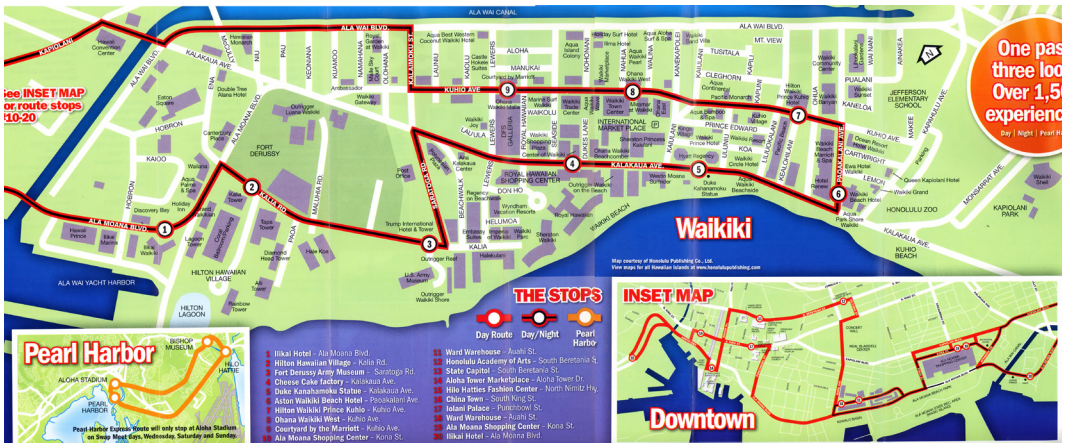

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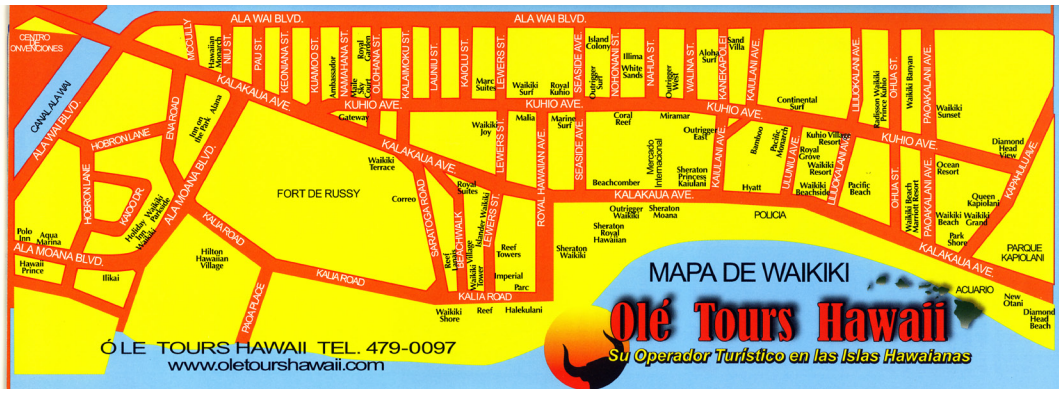


FIGURE 4-15: ROAD MAP: THE BUS MAP: MECHANICAL MOVEMENT (POINTS OF DISPERSAL AND ARRIVAL)
FIGURE 4-16: ROAD MAP: TRAVERSING WAIKIKI BY BUS (EXPLICIT POINTS OF DESIRE)
FIGURE 4-17: ROAD MAP: OLE TOUR HAWAII MAP: EXPLICIT POINTS OF DESIRE (RESTAURANTS, DIAMOND HEAD, HOTELS, POLICE STATION)

movement and circulation are creating daily routines or patterns for most of the visitors. For instance, Kuhio and Kalakaua Avenue circulate the movement of pedestrians and vehicular traffic, which enables the traversing of Waikiki at various trajectories and speeds. Even without a trolley, bus, taxi, or helicopter one could still find their way relatively easy in Waikiki, but if you have bad sight or bad hearing or both, the site becomes something different and quite unimaginable. Waikiki could seem like an amusement park to the blind with all the auditory cues that are given, but not enough tactile and auditory maps of spatial information. Absent are the signs that give motivation and direction for many travelers with different handicap abilities.

4-18

4-19

In **figure 4-19**, this kiosk is a place at which the traveler and tourist can find brochures and maps. The explicit points are seen through these ephemeral mappings of Waikiki's terrain.

4-20

FIGURE 4-18: TROLLEY TICKET
FIGURE 4-19: BROCHURE RACK
FIGURE 4-20: KALAKAUA AVENUE & BEACH WALK

In **figure 4-20,** the beach's edge and the pedestrian path converge on Kalakaua Avenue, allowing bodily movement across different surfaces of the terrain towards points of desire.

modes of traversing

One traverses the terrain of Waikiki in various ways, such as walking and moving across the landscape at different velocities. Each mode of traversing gives a different experience to the user of the space that they occupy and move through. The mobility of the human body to traverse space towards a destination while directing themselves on a path is crucial and fundamental. Every act of movement along a path influences the journey for the user; that is, the traversing of a terrain can have many points of departure and arrival. The gateways of Waikiki, such as the historical hotels, building murals, and Diamond Head create these points of transition within a trajectory along a route to the site. They signify an entrance as well as an identity of passage into a specific place. In **figure 4-21**, the trolley map affords a traversal of Waikiki and its other regions that surround it, these points are parts in a string of movement with specific moments of arrival and departure.

tra·verse
1. a route or way across or over
2. the act or an instance of traversing

modes of arrival

There are various modes of arrival in Waikiki after arriving at the Honolulu airport. These mechanical means of movement (buses and automobiles) allow the traveler or tourist a quick and easy way to enter Waikiki. They can traverse the terrain to the hotel or locus point within a half an hour. Once at their destination they can ex-

4-21

FIGURE 4-21: ROAD MAP: TROLLEY: THREE GREAT WAYS TO SEE HONOLULU, EXPLICIT POINTS (BEACHES, HOTELS, AQUARIUM, DIAMOND HEAD, SHOPPING)

perience the area and find their way around with the help of maps and brochures if they are first-time arrivals. If they have been here before they can rely on memory of the terrain and landscape for traversing to find what they want in Waikiki; for example, Diamond Head may serve as a landmark or marker for orientation.

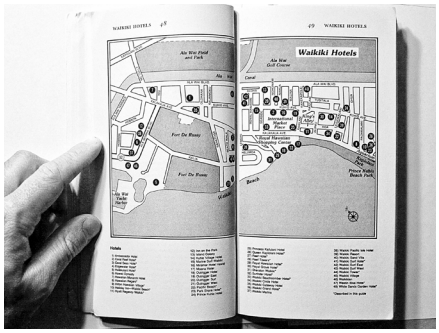
4.5 TRAVEL GUIDES AS ITINERARY

Many tourists or travelers to Waikiki use travel guides at some point along the way. They serve as a guide to allow one to orient themselves and find destinations or points of desire. Most travel guides give mappings of the site; for example, a Fodor's guide of Waikiki illustrates through mapping the hotels, restaurants, scenic spots, and any other destination that has meaning and significance to the given site. Most travel guides allow travelers the ability of planning, such as, figuring out their itineraries and paths to multiple destinations. These travel books are ephemeral mediums, which archive the information about a specific place; for instance, its internal pathways to chosen points, within its borders are the regions or domains of interconnection and movement. In **figure 4-22** to **4-25**, this travel guide communicates, to the visitor, through multiple maps, which are explicit of desire and destination.

This interconnecting movement allows the user an affordance of mapping and perceiving the environment, a terrain rich with familiar and unfamiliar regions; nevertheless, the "environmental image"[118] or cognitive map is understood through the human senses, which distort and simplify it. This

118 Kevin Lynch, *The Image Of The City* (Cambridge Mass.: Technology Press, 1960), 6.

4-22



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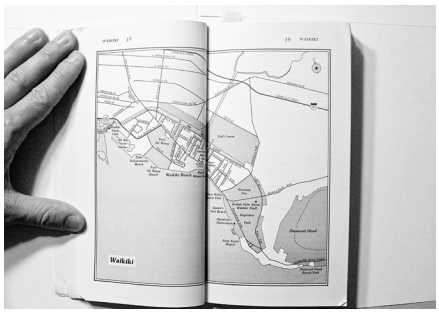

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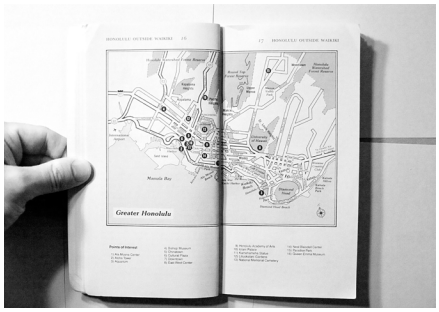

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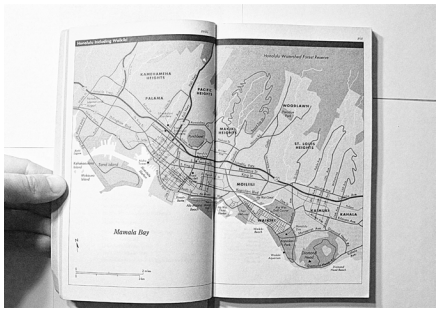


FIGURE 4-22 to 4-25: TRAVEL GUIDE: FORDOR'S WAIKIKI, EXPLICIT POINTS (HOTELS, BEACHES, KAPIOLANI PARK, FORT DERUSSY, DIAMOND HEAD, SHOPPING)

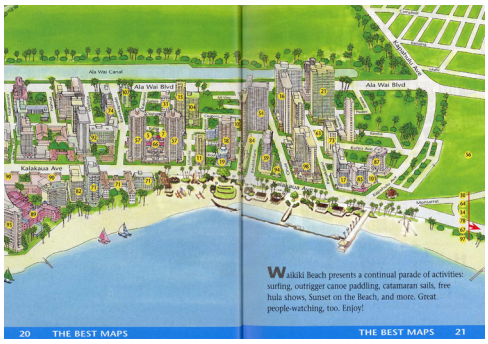
interaction of the users mind internally and externally, forms a binary of relationship, which flips on and off mentally, according to the environmental stimulus in proximity. Moreover, the user's perspective and mental representation of the terrain is in flux, a distortion and non-Euclidian image, which is not exact and needs to be adjusted periodically through the use of maps and signs.

Travel guides give a perspective of entertainment and destination seeking, a short list of spots to visit within a site. In Waikiki, the travel guides try to give the traveler a perspective, which is informative and persuasive. This persuasion through books of travel, reveals that the image is a construction, a compilation of movements or traversals, that the reader can acknowledge or ignore, but giving the reader and user of urban signs a choice within a prescribed framework. In **figure 4-26** to **4-28**, this travel guide illustrates three dimensionally the explicit points of Waikiki's terrain. Each page spread illustrates hotels, which becomes a locus for the visitor, traversing out, to explore the points of encounter and impulse.

4.6 MOBILE DIGITAL TOOLS

The digital devices that give the tourist and traveler a sense of awareness, in the spatial matrix of desire, are augmenting our reality. For example, an application on the IPhone called "Where to?" represents a real time terrain that the camera captures then layers a digital grid on top with points of interest.**(figure 4-29)** The traverser can use this device to move through the terrain while interfacing with a digital and physical landscape. An augmentation of reality, which creates digital matrices of desirable

4-26



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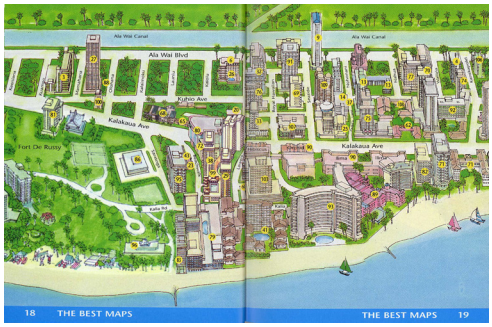


4-28

FIGURE 4-26 to 4-28: THE BEST MAPS: TRAVEL BROCHURE: EXPLICIT POINTS OF DESTINATION AND DESIRE (HOTELS, BEACHES, RESORTS, SAILING)

points, one encounters in tangible form. This enables a more integrated experience of mapping, traversing, and finding because it merges the two binaries of digital and physical space. **(figure 4-30)** Thus, integrating the spatial and digital matrix of desire with the visual sensibility of user, to enhance their cognitive and perceptive abilities.

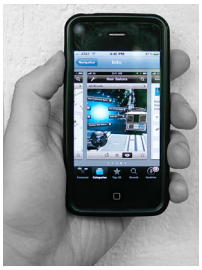
tra·vers·er
1. a user of the urban terrain that traverses towards points of desire, either, digitally, bodily, or mechanically.

aug·ment·ed re·al·it·y
1. an artificial environment created through the combination of real-world and computer-generated data

augmented-reality tools

Augmented-realty could allow the traveler of the terrain to layer maps digitally in real-time. This would give the user more information about specific points of desire that they were traversing or moving towards. Each point would be an integration of the virtual with the physical reality of the user in the space. In Waikiki, this technology would benefit the visitor, for example, Nokia's augmented-reality glasses could help with navigating, traversing, and finding points of desire and destination. **(figure 4-31)** Yet, even layering digital information in eye contacts, could afford an altered perception and heightened cognitive ability to map the terrain. **(figure 4-32, 4-33)** Nonetheless, these contemporary technologies need further investigation, which can lead to expanding one's experience of the spatial environment.

4-29



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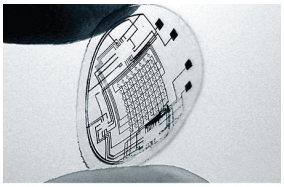
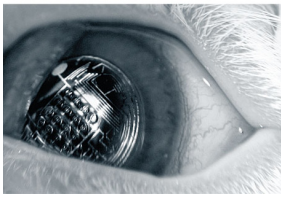




4-33

FIGURE 4-29: IPHONE APPLICATION: WHERE TO?
FIGURE 4-30: IPHONE APPLICATION: GOOGLE MAP
FIGURE 4-31: NOKIA'S AUGMENTED-REALITY GLASSES
FIGURE 4-32: RABBITS WEARING LENSES WITH METAL CIRCUIT STRUCTURES: UNIVERSITY OF WASHINGTON
FIGURE 4-33: RAYGUN STUDIO: NEW GENERATION OF CONTACT LENSES BUILT WITH VERY SMALL CIRCUITS AND LEDS

conclusion

The destinations and points of desire in Waikiki, for the tourist or traveler, are embedded in the tools of finding one's way: the consumer maps, road maps, travel guides, and even the mobile digital devices. These instruments afford the visitor a choice of how to find their destination and point of desire. Itineraries, for instance, are practices in space through direction, vector, and movement, while using these wayfinding tools. However, the tools represent an interpretation and explicit layer of desirable destinations, while the interstitial and impulsive points are yet to be discovered or encountered. Nevertheless, there are layers of expectation that the visitor to Waikiki encounters and discovers, from the explicit to the implicit, or the impulsive to the interstitial, spatial impressions of traversing.

05
CHAPTER
SPATIAL MATRIX OF TOURISM

CHAPTER 05: SPATIAL MATRIX OF TOURISM

The spatial matrices of tourism are multiple and need investigation. This is an approach of empirical observation and survey for understanding the nature of desire and destination, which manifest in points of difference and confluence within one's traversal. How does one traverse a terrain and find their destination within a spatial matrix of points? They encounter things along the way, which influence and curb or expand their experience of place and space. In **figure 5-1**, the beach of Waikiki is crowded with travelers to this sandy strip, the beach towels, snorkeling gear, surfboards, and umbrellas make this a desirable spot and destination, an exotic excursion from banality.

Once arriving in Waikiki, how does the traveler or tourist find their chosen destination? Do they use an assortment of wayfinding instruments, such as maps, brochures, kiosks, PDAs or smart phones, Internet, or just their raw intuition? If so, then, there probably is a system of finding for traversing Waikiki's terrain. For instance, a tactic of observing and understanding how the traveler or tourist cognitively maps their terrain is to give them a survey, which asks them questions about finding their points of desire and destination.

Another part of the survey allows the visitors to trace out their paths of movement towards their points of desire over a base map of Waikiki. This will afford a comparative analysis of these mappings from the different travelers and tourists. These maps of movement can prove valuable to the synthesis of new mappings, which are not yet constructed or perceived, but only understood in the user's perception of a given spatial framework. Understanding

5-1

5-2

FIGURE 5-1 WAIKIKI IMAGE: BIRD EYE VIEW
FIGURE 5-2 WAIKIKI IMAGE: PEDESTRIAN WALKING FROM BEACH

"I WAS **LOOKING** FOR A BEACH LOCATION WITH JUST THE RIGHT SUN BATHER DENSITY, OTHER PEOPLE TO WATCH AND ENTERTAIN ME, BUT NOT SO MANY THAT I FEEL CROWDED."
(WAIKIKI VISITOR)

these patterns of movement and traversal over a terrain using an itinerary or not, may allow for a more holistic view; a procedure in which one has to find their path to the destination, and back to the point of origin and departure. In **figure 5-2**, the tourist with his floats walks by a statue that could serve as a marker and sign of orienting.

What are the similarities and differences in how tourists find points of desire in Waikiki? When travelers arrive in Waikiki for the first time they are anticipating something different then someone who lives here and a resident. Yet both still visit the beach and traverse the strip of Waikiki, a similar movement across the landscape towards points of destination. Along Waikiki's strip desirable spots of interaction and impulse take place, intervals of instance and insight from the tourist in a foreign terrain. A practice in "terra incognita" which translates for mapping the unknown terrain, for instance, travelers practice this ability routinely to make sense of their spatial environment. This creates meaning out of the unknown and a place of familiarity for the daily practitioner of space.

5.1 TOURISTS AS SUBJECTS

The travelers to Waikiki are traversing the landscape to destinations of desire. These points are desirable places they want to experience because they offer unique moments in the journey. They can discover and encounter situations, which give them a sense of excitement and pleasure. By surveying the tourist one can start to inquire about their daily patterns. The user's spatial patterns of movement on the terrain are traces of trajectory, which one participates and engages, in position to find points of destination. Each user or tourist has his or her own itinerary of traversing the landscape. It leads in a multiplicity of directions and paths. Indeed, every movement forward takes into account the choices made and paths taken to a specific place of desire. In **figure 5-3**, a tourist just arriving in Waikiki with baggage and waiting for the signal to walk.

tourist's schemata

The tourist manifests points of impulse and desire, which allows them to anchor meaning and orient themselves with their surroundings. For instance, the maps in the surveys given were created by the tourists to Waikiki, with a layer and base map of the site as a guide. They were able to find their location and trace their movement and trajectory from one destination

5-3

FIGURE 5-3 WAIKIKI IMAGE: VISITOR ARRIVING OR DEPARTING

to another but always making reference to the points of interest to anchor their traversal of space. These relationships of point to path where seen in the surveys and for orienting the user in their place with habitual movement. These maps and instruments of wayfinding were used by the tourist to orient them in the terrain; to traverse it with the help of their mobile devices that have global positioning services (GPS) in real time. The forms of representation that affords one to navigate Waikiki are seen in brochures and maps one encounters while traversing the terrain. Furthermore, these schemes of orientation through the landscape are mental maps that help the user or tourist find their way and direction toward a destination of experience.

A unique approach of mapping was taken, representing the movement of the traveler from the street to the scenic views. The water's edge has an ability to attract many people with its white sands, cool breezes, and views of Diamond Head. It is a known destination, a spot of leisure. Most of the tourists surveyed, mapped the beaches along its coast. Perhaps, this was because of its appeal to the human senses of sight, sound, smell, taste, and touch, which signals to the user of these scenic beaches and landmarks along its sandy strip. These are a primordial cues that are inherent to the site's position, climate, and geography.

traveler's cognitive ability

The user's perception of the urban terrain in Waikiki tends to vary in cognitive ability. In the urban spaces that users traverse, each person perceives the environment differently; that is, each perception is unique and similar to a person's identity. The past experiences, memory, and cultural influences all affect meaning of sensory perception that each individual inherently carries with them as a part of a toolkit for discerning their surrounding space.[127] Each traveler or user to Waikiki's terrain has a "perceptual fingerprint" [128] , which helps him or her create a "cognitive map" [129] or spatial configuration that serves as a mental representation that's distorted and simplified for its cognitive retrieval.[130] Each person has different perceptions of reality that inform the decision-making process,

127 Robert Jacobson, *Information Design* (Cambridge Mass. : The MIT Press, 1999), 107.
128 Ibid., 105.
129 Andrea Gleiniger, And Markus Christen, *Pattern Ornament, Structure And Behavior* (Basel: Birkhäuser, 2009), 59.
130 Ibid., 59.

5-4

5-5

FIGURE 5-4 to 5-5 WAIKIKI IMAGES: PEDESTRIANS WAITING FOR WALKING SIGNAL TO CROSS STREET

moving through space, and finding their points of desire. In **figure 5-4** and **5-5**, the movements of the user are organizations and patterns around the spatial matrix of condition; the signs signify a mechanical movement such as riding the trolley or crossing the street. These perceptive cues form a set of movements, patterns, shapes, smells, and tactile sensations that create our phenomenal experience or individual reality.[131]

5.2 WAIKIKI AS SURROGATE HOME

People who visit Waikiki tend to set up a home and a pattern, which differs from their original local. These patterns are full of encounters and destination seeking with the help of maps and brochures to negotiate their way through the terrain. Traversing the space of Waikiki as a walker and a participant in the consumption of experience, which entails the ocean views and storefronts of various goods. Meaning attaches to the specific images or points; one encounters and observes in the context of the urban landscape because it functions to reveal ways of directing and orienting the user. In **figure 5-6**, the hotel serves as this surrogate home which the tourist and traveler sets up routine patterns of movement and experience. Indeed, the hotel serves as a locus, to where the visitor returns while traversing Waikiki's terrain, in a spatial matrix of desire.

tran·sient
1. passing through
2. a place with only a brief stay or sojourn

131 Robert Jacobson, *Information Design* (Cambridge Mass.: The MIT Press, 1999), 108.

imageability

Every built place has degree of "legibility"[132] and communicates information to the user for a variety of purposes. Waikiki is a "tropical resort destination"[133] that facilitates the leisure and consumptive lifestyle of the visitors, and has many destinations and encounters within its edge. With each turn and straight path along the edge of Waikiki beach, one starts to formulate a mental image of the experience and its uniqueness. These qualities and characteristics create the user's perceptual understanding that allows for a spatial image to form in the mind. This resort town has many modes of communication that allow the user to find what they are searching for; signs and spatial cues that convey the terrain's multitudinous of desirable points.

132 Kevin Lynch, *The image of the city* (Cambridge, Mass.: Technology Press, 1960), 2-3.
133 *Waikiki Special District Design Guidelines* (Honolulu, Hawaii: Dept. of Land Utilization, 1996), 3.

5-6

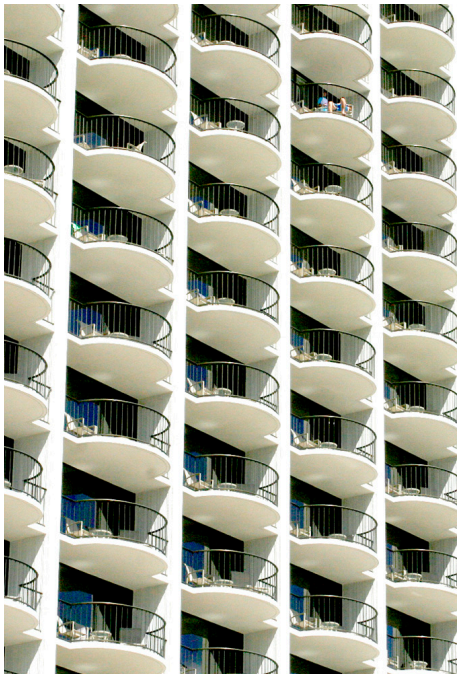


FIGURE 5-6 WAIKIKI: HOTEL OR SURROGATE HOME (A LOCUS FROM WHERE YOU TRAVERSE, TO SEEK DESIRE AND DESTINATION.)

"I **FOUND** A GREAT VIEW DOWN THE BEACH WITH PALM TREES BLOWING IN THE WIND, IT MADE MY HEART FEEL AT PEACE."
(WAIKIKI VISITOR)

Being able to understand and read the environmental codes of a culture one encounters on their travels to unknown terrains is crucial and leads to wayfinding ease.

The image of Waikiki can be deconstructed into different parts, so that an understanding of the city as a representation of signifiers, which amount to the user's totalizing view. Perceiving an image of the urban environment, through the identification of parts, such as, its identity, structure, and meaning brings to the participant a sense familiarity depending on their perception of visual urban cues.[134] Most environmental images need specific parts to enable a representation to trigger in the mind of the beholder; for example, Waikiki's features enable specific cues to become embedded in the users perception that can be architectural or part of a "space syntax" [135]. An identity of urban life in that specific local can become a feature that responds to the image and reinforces its production in its participants or viewers.

The environment's readability to visitors is important to the notion of mental representation that helps them in understanding their surrounding. Especially in Waikiki this idea of an exotic and tropical image of island life as an ideal, which promotes a unique Hawaiian experience for the user that affords them a degree of the spectacular. These events and experiences in Waikiki can enforce a mental representation that serves as a way to recall and interpret decisions made while traversing. As images and representations accumulate from movement in the space, memories can become embedded in the mind and the place with which one observes. In **figure 5-7**, the beach visitors take in the sun and

134 Yi-Fu Tuan, *Space And Place: The Perspective Of Experience* (Minneapolis: University Of Minnesota Press, 1977), 70.
135 Andrea Gleiniger, And Markus Christen, *Pattern Ornament, Structure And Behavior* (Basel: Birkhäuser, 2009), 67.

5-7

FIGURE 5-7
WAIKIKI BEACH: THE TRAVELER'S AND TOURIST'S POINT OF DESIRE, A SUBLIME EXPERIENCE OF THE HORIZON

experience the apparent horizon of the place, which creates a sublime experience and point of desire.

Waikiki as place

Place is a representation that allows one to gain an understanding about the locality and its position in relation to other points in space. Waikiki circumscribes the idea of a resort destination that is inextricably linked to other places of departure, which is an accumulation of points that the user finds while traversing the landscape. When one understands the place, then they can read the environment for better legibility and meaning thus influencing the goals that the user sets. In Waikiki the visitor or user of the environmental information interprets and makes choices depending on the preference and goal that they have in mind.

The space that the user inhabits intertwines with the place in which Waikiki resides; a place of perception and myth, which translate to a traditional Hawaiian aesthetic and practice. This tradition of Hawaii is seen more as a commodity of leisure and fantasy then the initial conception of what the culture had conceived it. Yet, this destination is a tropical getaway, which intrigues the visitors that come and explore its shores while participating in the 'aloha' of the place. Waikiki is a place where one can forget about the immediacies of life and live a leisurely existence with short-term goals that circumscribe the area or beach resort town.

These goals or points along the journey or path that one encounters along their vacationing in Waikiki, differs and shifts. Each person who experiences this unique site comes into contact, at least for a short time, with points in space that they uncover from the everyday practice of walking Waikiki's strip. These points can represent destinations and goals along a path in the user's journey, inviting encounters and discoveries. The goals can represent particular points and moments in the traversal of space, which one engages to experience the places and spaces throughout the built landscape.

Waikiki as tissue

The tissues of Waikiki as "neutral elements", [136] which create a web of instances of communication in the urban body are transitional and unfixed. These elements represent signifiers of functional utility within the built context that the user has to interpret and use. This rhythm in a destination resort can be understood through Barth's analysis as an integral thread that is woven of neutral movements of users. These threads create what Roland Barth calls marked and unmarked elements in the spatial sequencing of the city. The meaning can be seen as "the absence of sign", [137] which means that the user brings their own baggage to the signified with multiple signifiers or meanings while still acknowledging the signs dominate meaning within the context of Waikiki. In **figure 5-8,** the paths and architecture of Kalakaua Avenue along the beach are signifiers of movement through the use of the wave as a motif, and a shading device for traversing the space.

136 Roland Barthes, *The Semiotic Challenge* (New York: Hill And Wang, 1988), 194.
137 Ibid., 194.

A tropical destination can be seen as a system of tissue, which indicates the function of its elements and its communication of signs, in meaning to flow while the user navigates and penetrates its edges. This interface of the built landscape is a vehicle of "semantic power"[138] that gives the city its dynamic and catalytic energy of change. The phenomena of signification that Barth refers to as an "irreducible specificity",[139] introduces the notion that the city is complex and not a simple condition. Thus, the city has many connections and nodal conditions that create tissue like appendages, which act as internal systems of signals and perceptional cues, embedding within the urban condition.

138 Roland Barthes, *The Semiotic Challenge* (New York: Hill and Wang, 1988), 194.
139 Ibid., 194.

The perceptual areas act as guiding elements in the landscape for the user. In addition, these points of impulse are in a connotative and denotative shift, an operation of change, revealing and uncovering instances of desire. Thus, the city is seen as a text, which one reads and interprets the meaning, through the environment of peripherals that one encounters.

5.3 DESIRE VERSUS DESTINATION

The act of traversing towards a destination within an urban context, for instance, in Waikiki, requires some expectation and desire to seek these spatial points out. Finding these destinations requires a desire to seek them out, however, the visitors can discover spatial points of interest along the way. These mini destinations inform one's

5-8

FIGURE 5-8 WAIKIKI: KALAKAUA AVENUE PEDESTRIAN WALK, THE BUILDING'S AWNING MOTIF OF A WAVE, FLUID MOTION OF FORM

encounters–an impulsive point of instance, which one maps, analyzes, and experiences within the spatial interstice of a terrain. The differences between points of destination and desire are multiple; the former is a plan of action, procedure, or movement with an itinerary while the latter is an impulsive and spontaneous occurrence. However, these points of desire become destinations after uncovering and revealing them within the interstices of the visitor's daily practice in the spatial terrain.

explicit points of desire

Once the traveler arrives in Waikiki and finds a desirable hotel (a locus from which they leave and return too), they seek explicit points of destination within the terrain. In **figure 5-9**, for example, the tourists and travelers expect and anticipate specific points of desire within Waikiki, such as the beach, Diamond Head, bars, restaurants, memorials, hotels, and activities of shopping. The graphs survey thirty tourists and travelers that spend time in the islands, on average about seven and a half million people annually travel here. Yet, we see that thirteen tourists and travelers desire the beach over Diamond Head, five more visitors prefer restaurants to bars, and three more visitors would rather shop then

5-9

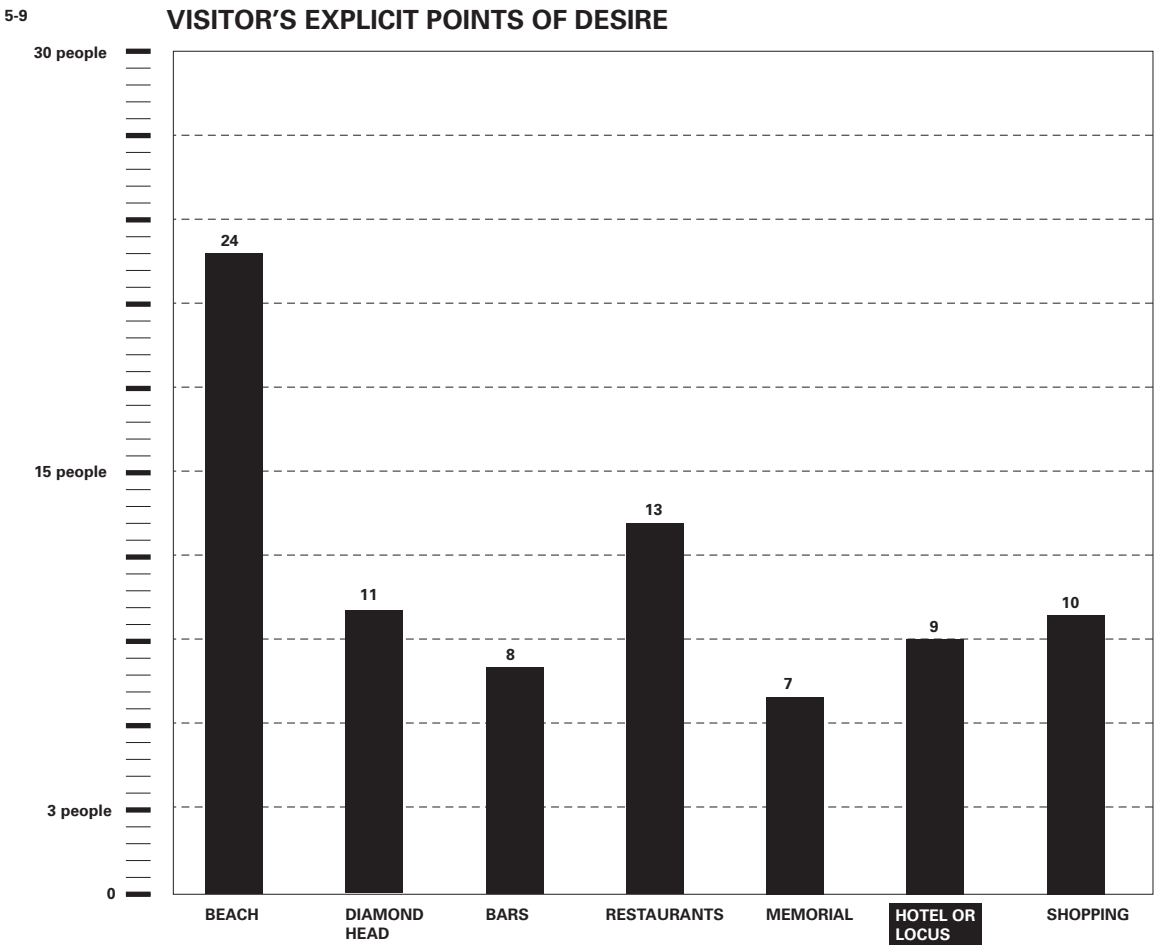


FIGURE 5-9 VISITOR'S EXPLICIT POINTS OF DESIRE BY NUMBER OF TOURISTS AND TRAVELERS TO OAHU

go to a memorial (Pearl Harbor). These points create a "monumental" matrix, which is multiple and works on a macro scale, seen through the maps, brochures, and travel guides given. Thus, making a spatial matrix of points that can be analyzed and determined in relation to other interstitial matrices, given to the visitor traversing the terrain. Furthermore, in the interstitial, implicit, and impulsive points of desire and destination, a multiple of mini matrices that lead to discovery and encounter are found.

interstitial, implicit, and impulsive points

What are these layers of expectation that the visitor's anticipate, discover, and encounter while traversing unknown terrains. In Waikiki for instance, tourists and travelers encounter many points of desire that are impulsive, interstitial, and implicit making up multiple matrices of experience. In **figure 5-10**, the points of desire are extracted from the surveys given to the visitors, which show that these points do exist in Waikiki. We see that fifteen people out of thirty surveyed discover desirable points while walking Kalakaua and Kuhio Avenue,

5-10

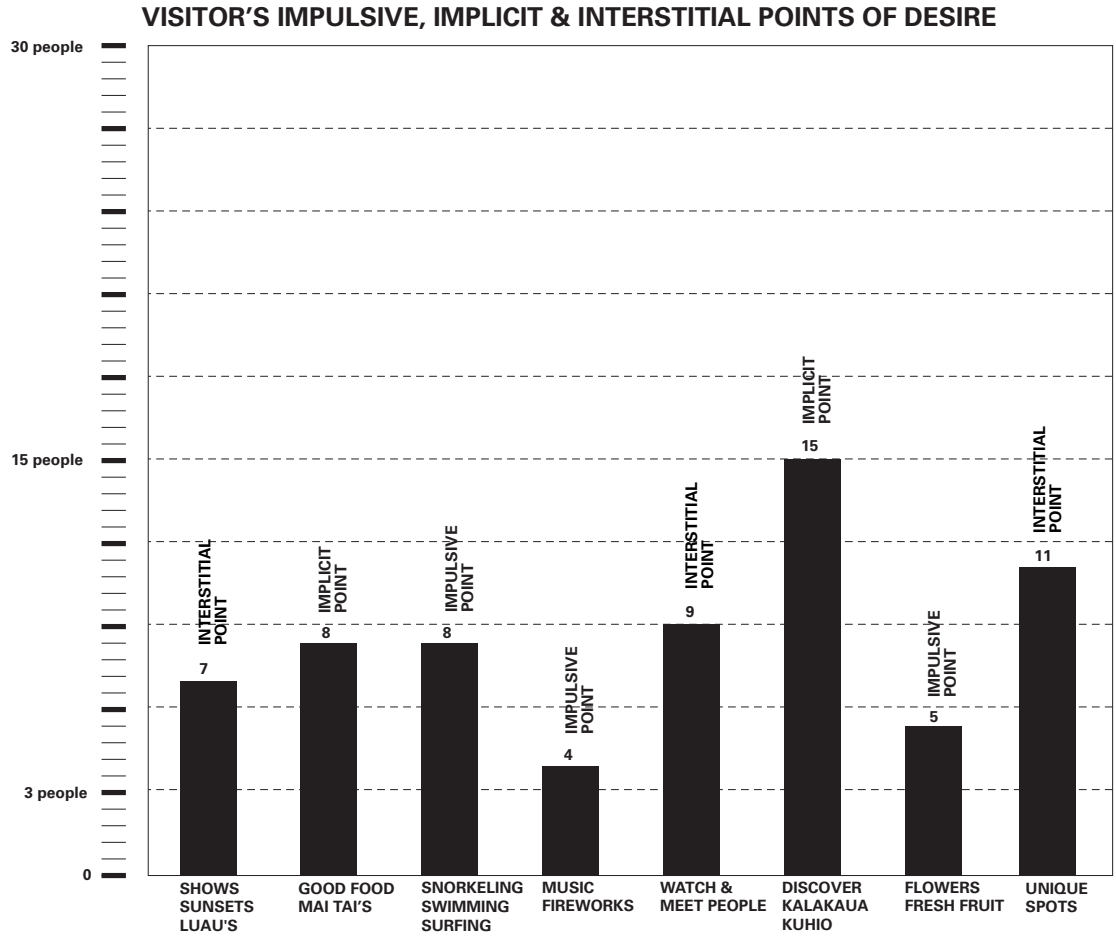


FIGURE 5-10 VISITOR'S EXPLICIT POINTS OF DESIRE BY NUMBER OF TOURISTS AND TRAVELERS TO OAHU

while five people prefer flowers and fresh fruit, and six prefer fireworks and music. Some of the impulsive points are water activities such as swimming, snorkeling, and surfing, while others are good food and Mai Tai's, which both are the same levels of expectation, eight visitors out of thirty. Yet, some of the interstitial points are unique points of desire, which include Leonard's Bakery, Harbor Pub, Shorebird, Lulus, and Nashville Waikiki, which eleven people out thirty found these destinations. Other interstitial points of expectation, which nine people out of thirty reveal, are seen as a voyeuristic of others or encounters, such as with tourists, travelers, and homeless people, either as amusement, enjoyment, or suspicion.

5.4 PATTERNS OF TRAVERSING

The user's bodily movement across a landscape towards a destination is critical in finding one's place. Waikiki's urban context affords many to traverse the terrain and find what they want; yet, every tourist has to set up a daily practice that gets him or her from one destination to another while staying in Waikiki. This becomes a pattern that the tourist sets up in finding the beach, entertainment, and food, which amounts to a ritualistic pattern of movement and need.

motivation and experience

The user traverses the landscape because of motivations and needs. While traversing the landscape, a user experiences fluctuations of time and space. These fluctuations influence the perception and experience of the traveler in space. Indeed, the proximity and the vectors of movement create bodily trajectories for the user in space, for example, the mobility of the mind and body towards a direction, along a path, creates expectancy and desire in the urban framework.

familiar and unfamiliar

The experience of Waikiki is one of familiarity as well as unfamiliarity. For instance, how do tourists orient themselves to the terrain? Does this familiarization help in finding their way to a point of desire and expectancy in the urban environment? Indeed, familiarizing oneself with a terrain will have influence on the paths one takes. By traversing the landscape and familiarizing yourself with places and landmarks, one starts to imagine and cognitively map the surroundings, yet movement includes space as well as time, but this tends to happen simultaneously while traversing towards a destination. This direction and point of desire is a mental image, which is manifest in the cognitive ability of the user.

similarities in movement

The visitor's traversing of space across a terrain leads to similar trajectories of movement, instance, and rhythm. These paths that the user or tourist practices in a given space can have similar points of departure and arrival, for instance, in Waikiki many of the tourists go to the beach which can serve as a destination for enjoyment. The transition from the 'home' that the tourist sets up in this destination is a practice that is familiar but yet unfamiliar; a similar and dissimi-

"I HAVE THE **DESIRE** TO SWIM, THE OCEAN CALLED MY NAME.
I ANSWER, I'M COMING MY DARLING. I RAN TO HER AND
JUMPED IN WITH OPEN ARMS."
(WAIKIKI VISITOR)

lar event, a simultaneous relationship that creates meaning out of movement and pattern.

movement and perception

The movement of the user through space influences their perception and cognitive impression of the urban environment. In Waikiki, the orientation and perception of the user in the built landscape, alters and shifts meaning while traversing the spatial terrain. For instance, while in motion the user experiences different places at modulating speeds causing shifts in perception and cognitive experience, as one travels to destinations and points of desire. This speed of movement that the user perceives influences the exchange of information and the quality of communication in the urban space.[140] The speed of movement is crucial for communicating the intent of place that the user finds they are circumnavigating. For example, this "human sensory apparatus"[141] evolved to perceive sensory impressions while moving at about 5km/h, corresponds to the walking pace.[142] The difference between the user's spatial experiences of the urban environment by foot is different then by vehicle, for instance, all the human senses engage, to some degree, either by smell or touch that enables a holistic overview and remembrance of surroundings then faster means of traversing.

140 Frank Hoeven, Michael G. J. Smit, And Stefan C. Spek, *Street-Level Desires: Discovering The City On Foot: Pedestrian Mobility And The Regeneration Of The European City Centre* (Delft: University Of Technology, Department Of Urbanism, 2008), 139-141.
141 Ibid., 141.
142 Ibid., 141.

movement as progression

When the traveler or tourist moves through space they progress regardless of direction, but in most instances, the destination is the goal of moving. The visitors of Waikiki tend to find the act of wondering and "drifting"[143] toward these points of desire part of the experience; a progression of anticipation and discovery. This method of way-making or creation within instances of exposure, formalize spatial points of destination and desire, along the way.

sequential space

Transitioning through space, the traveler or tourist–a user of the Waikiki's urban terrain, manifests cognitive maps for sensing

143 Simon Sadler, *The Situationist City* (Cambridge Mass: MIT Press, 1998), 93.

5-11

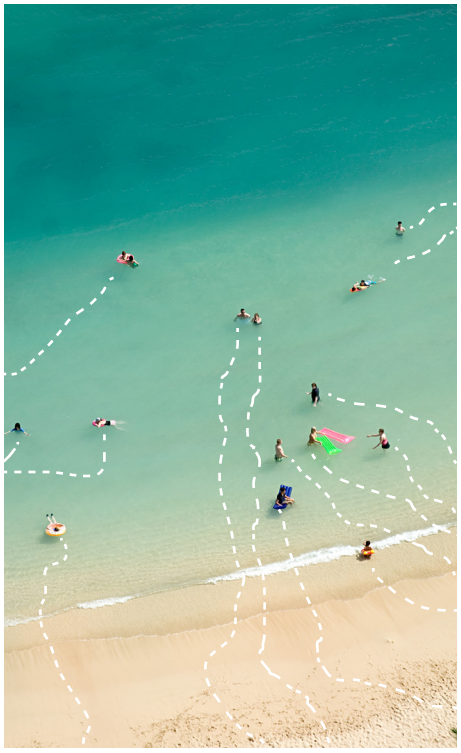


FIGURE 5-11 WAIKIKI IMAGE: BIRD EYE VIEW

the surrounding landscape by assortment of visual, tactile, and auditory cues and abilities. This transition in space and time enables each frame of the participant's sensory perception to cognitively engage the multiplicity of cues. Each point leads to another, and another to another, that is, the signs or signifiers of meaning relates to the visitor's entire spatial experience. This affords the user of this tropical destination a purpose, direction, and discovery within punctual transitions of motility.

Why do travelers use maps, travel guides, and itineraries in the trajectories of movement? Because, we as spatial beings need to organize space to better familiarize ourselves with the unknown terrain. This act of becoming more familiar with one's surroundings or "linguistic landscaping"[144] enables one to create new habitats and places of significance, an ability to create place out of non-place connects to a sense of spatial well-being. In **figure 5-11**, the visitors to Waikiki's beach create points of destination and desire in the water; snorkeling, sunbathing, floating, and swimming are the ways in which this occurs. Their traces or figures in the fluid terrain are spatial movements of an impulsive desire, which take up the whole trajectory of experience. Each dash line represents the visitor's fluid traversal of Waikiki's amoebic terrain, embedding points of impulse, desire, and unknown.

5.5 POINTS OF CONFLUENCE AND DIFFERENCE

The differences and confluences of form, structure, trajectory, and points of desire,

144 Romedi Passini, *Wayfinding In Architecture* (New York: Van Nostrand Reinhold, 1984), 56.

5-12

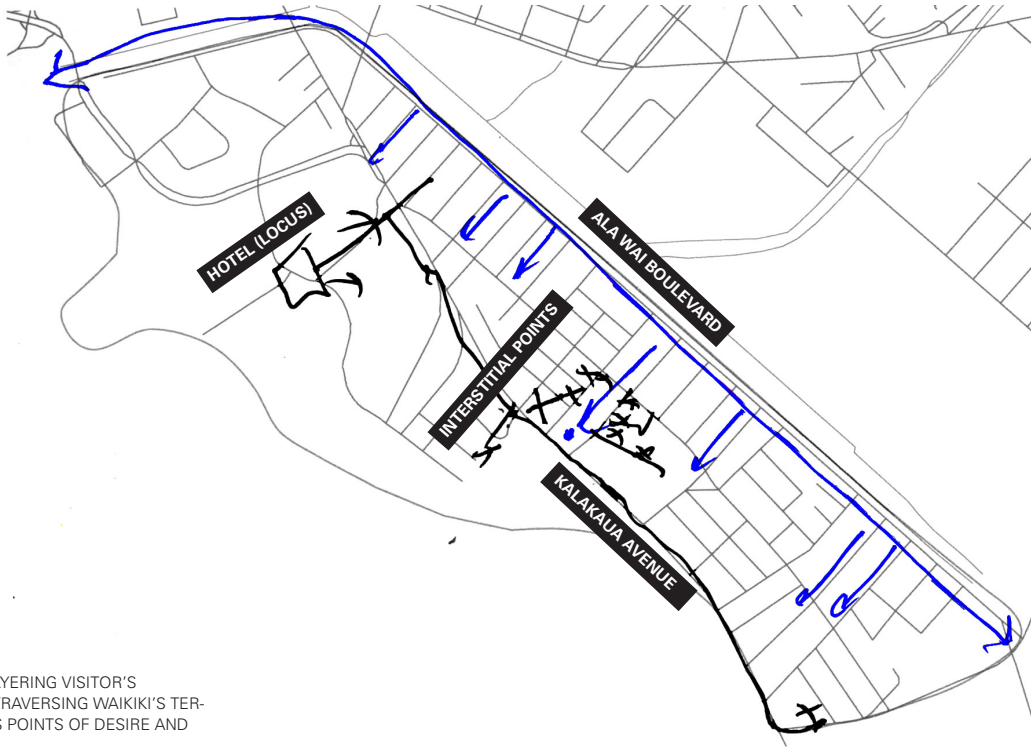


FIGURE 5-12 LAYERING VISITOR'S SKETCHES OF TRAVERSING WAIKIKI'S TERRAIN TOWARDS POINTS OF DESIRE AND DESTINATION

embed themselves in the visitor's movements, and spatial rhythms of Waikiki's terrain. Therefore, the similarities and differences of destination and motility can be analyzed and distinguished in the maps collected and sketched of the given terrain. Each tourist and traveler has a trajectory and points of desire, which they routinely practice and diverge from, in structure, form, and spatial enunciation, an oscillation of difference while traversing the terrain. Indeed, when overlaying the tourists' and travelers' sketch-mappings, one reveals and uncovers a structure of motility in Waikiki's terrain, and multiple points of desire and destination, from the interstitial to the impulsive, however, these spots alternate between the visitor's perception and spatial rhythm.

Each traveler I surveyed had an open-ended itinerary allowing for a more spontaneous act of traversing Waikiki's built landscape.

In **figures 5-12,** there are two layers of maps (visitors' sketches), which forms a structure and projection of movement along unique points that the tourist and traveler found; for instance, each had a destination to discover, but both of the drawing's figures or structures were in the direction of the water, to some degree. One of the visitors, for instance, uses the Ala Wai Canal (sketch in blue) and the side streets to traverse towards explicit points within the beach strip. While the other visitor (sketch in black) traverses Kalakaua Avenue towards other points of desire, but still using the beach and Diamond Head as a backdrop of destination and orientation.

In **figures 5-13,** both traces of movement are along the water's edge, each of the visitor's trajectories have similar movement and destination, such as the beach walk

5-13

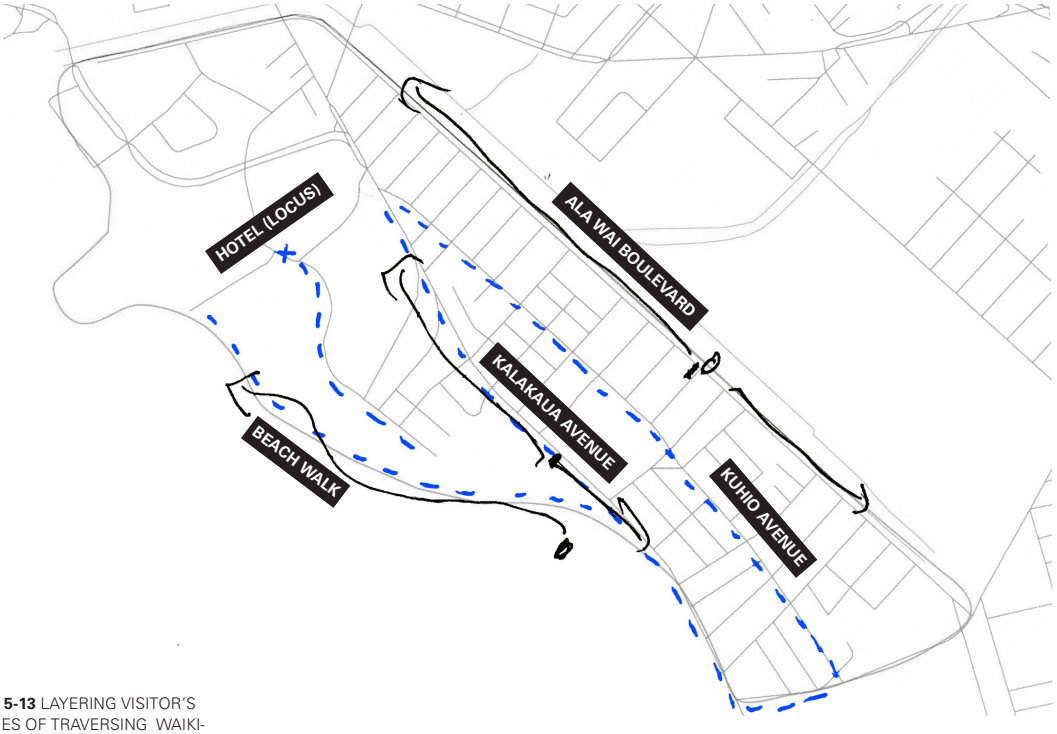


FIGURE 5-13 LAYERING VISITOR'S SKETCHES OF TRAVERSING WAIKIKI'S TERRAIN TOWARDS POINTS OF DESIRE AND DESTINATION

and Kalakaua Avenue. Both traces superimposed on each reveals a structure of how the visitor traverses, and finds points of desire or destination within Waikiki's spatial matrix.

visitors' patterns of movement

Patterns of movement and traversal can be seen in the ways in which the traveler or tourist finds their destinations on the site. Each person that I surveyed mapped their ability to traverse Waikiki, with arrows, dotted lines, dashes, and geometrical frames of reference for destinations or points of origin. In **figure 5-14** and **5-15**, for example, both configure a trajectory of approach by using the main streets of Kalakaua Avenue and Kuhio, this movement engages the terrain's interstitial points of desire. These Waikiki mappings give an understanding of how the traveler finds, traverses, and discovers within spatial matrices of the terrain while revealing interstices of desire.

Most of the traveler's movements varied in destination finding; that is, a reasoning for choosing a particular path because of experiential interests, or just preferring one way over another. These patterns of movement either mechanically or bodily, are seen throughout this survey; for example, there are many similarities among the participant's paths chosen and paths traversed. This enables specific aspects of the terrain to be understood by revealing an underlying structure, which influences the movement, direction, and motive. In order for the user to learn from past movements and experience, one needs to interpret the motivation towards these points of desire. Allowing the travelers the opportunity of mapping their surroundings, which affords seeking and discover-

5-14

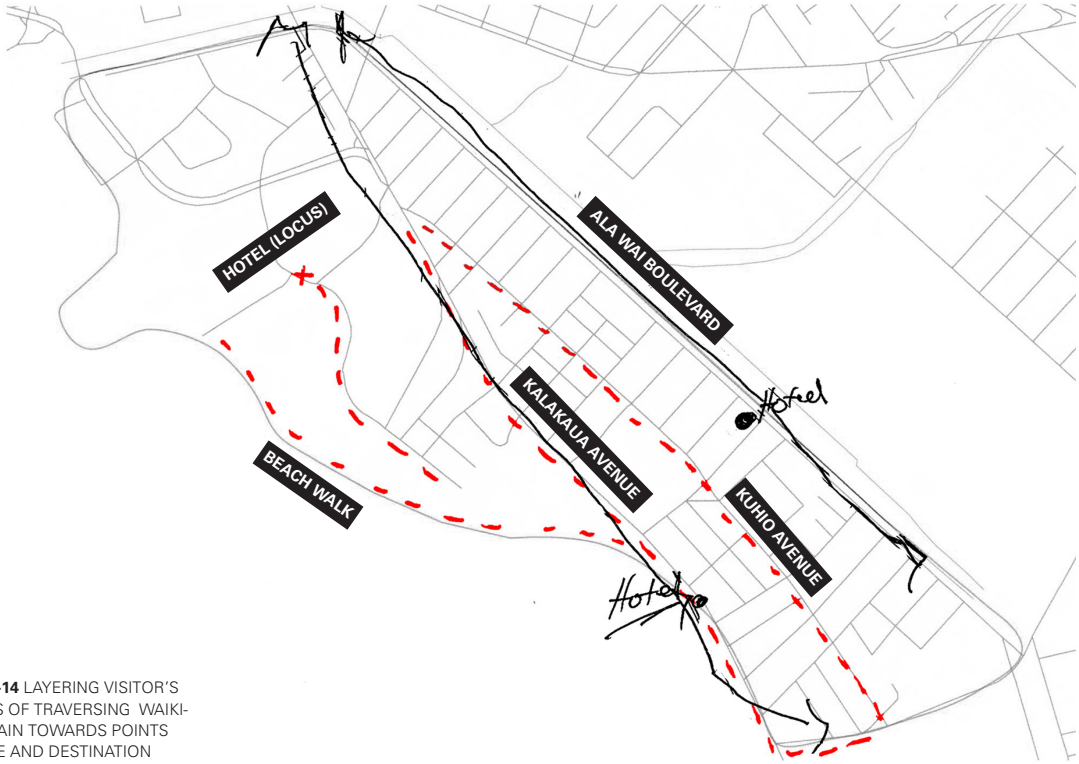
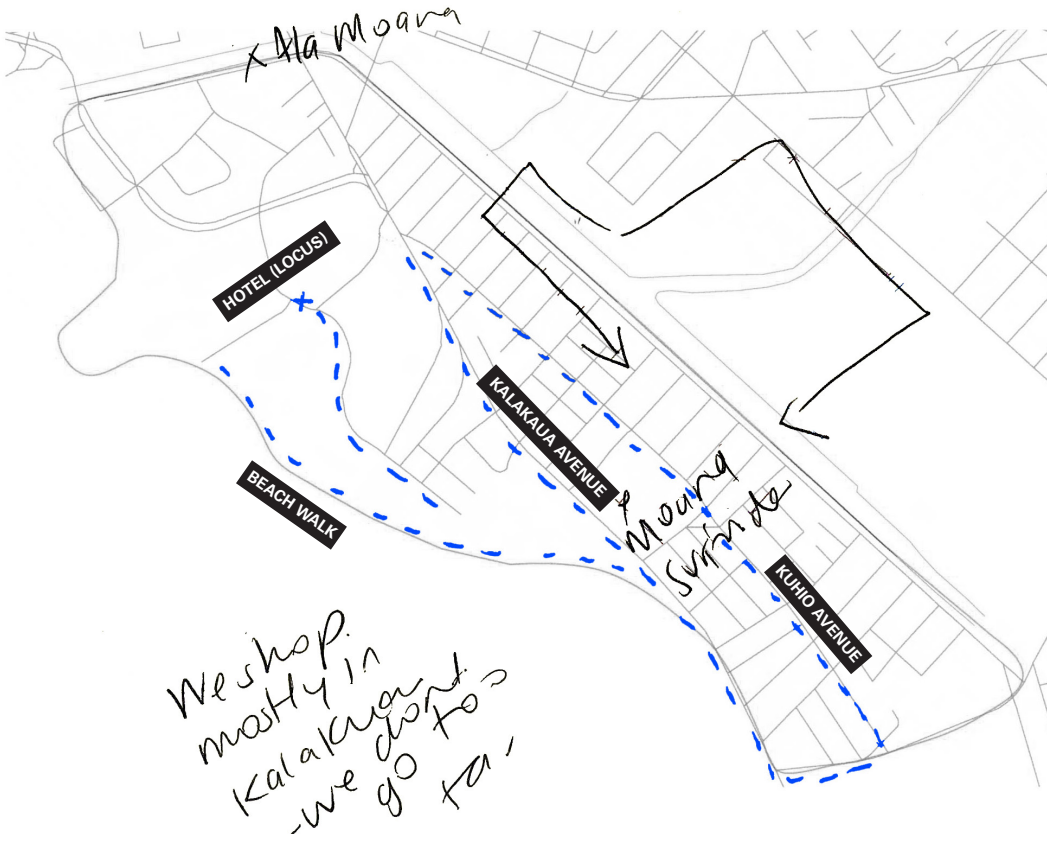


FIGURE 5-14 LAYERING VISITOR'S SKETCHES OF TRAVERSING WAIKIKI'S TERRAIN TOWARDS POINTS OF DESIRE AND DESTINATION

5-15



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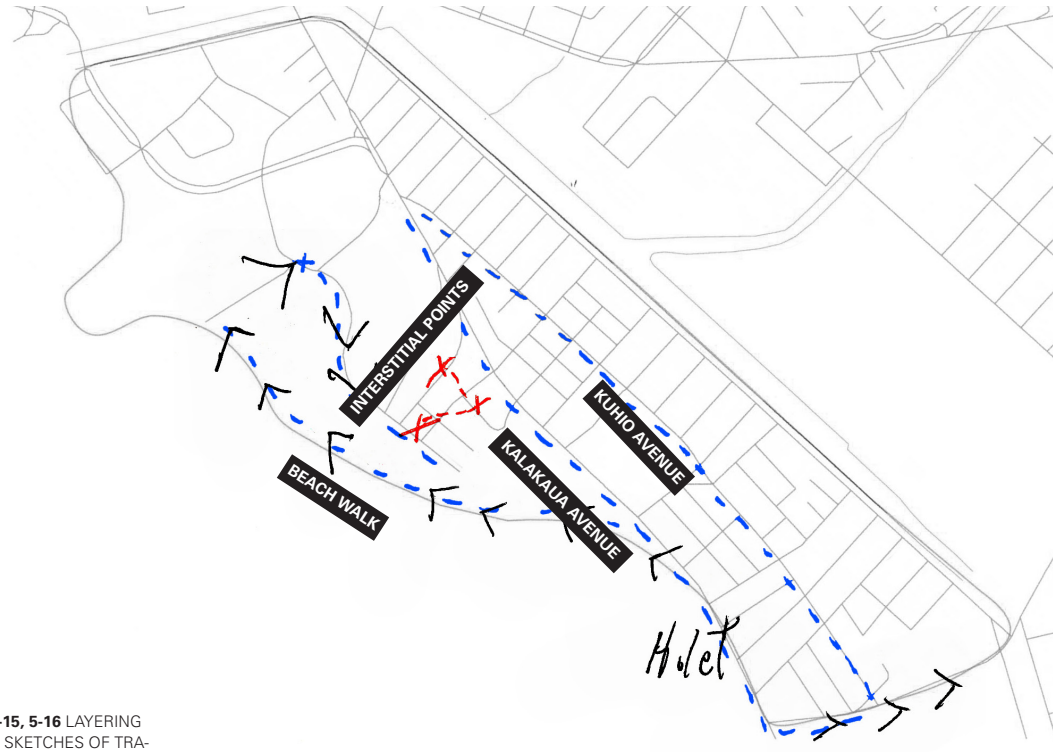


FIGURE 5-15, 5-16 LAYERING VISITOR'S SKETCHES OF TRAVERSING WAIKIKI'S TERRAIN, TOWARDS POINTS OF DESIRE AND DESTINATION

ing through spatial impulse and trajectory. The channels of movement by the traveler or tourist merge to form specific points, or trajectories of action and encounter. This confluence of paths, affords the visitors to Waikiki, moments of desire and impulse while traversing the terrain. In **figure 5-16 and 5-17**, for example, they both denote specific interstitial points within the trajectories of the visitor's mappings. These points (red x's that signify points of desire) are in close proximity to Kalakaua Avenue, which forms interstitial points between others that are unknown to us. Yet, there are differences in traversal patterns and points of impulse in both maps, in **figure 5-17**, the Ala Wai Boulevard is used by one visitor (red marking) and the other (black marking) uses Kalakaua Avenue as their main circulatory path, which they encounter multiple points of desire from impulsive to interstitial. In **figure 5-18**, these spatial points of impulse are seen again while another visitor traverses around Waikiki from the beaches to the Ala Wai Boulevard (red marking).

Yet, in **figure 5-19**, we see three layers, each being a visitor's trajectory that is overlaying the other to signify a common structure. The participant's movement (red marking) traverses Kalakaua and Kuhio Avenue, which then circles around, just like the other trajectory (blue dash-marks), which also merges with the "black" trace that has points of desire connecting to the path of movement.

5.6 IDENTITY OF PERCEPTION

Most of the users of Waikiki that I surveyed, in a small sample of a larger whole, were informed by visual, tactile, and auditory cues to orient themselves to their surroundings. For example, the visual representations take the form of street signs,

5-17

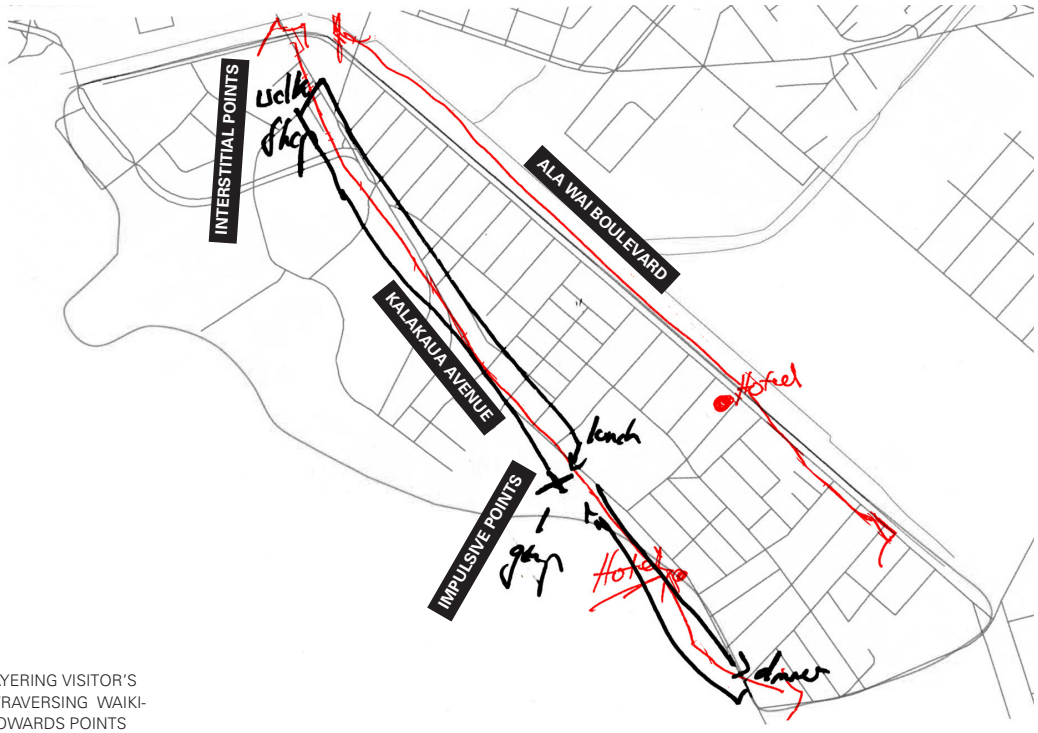
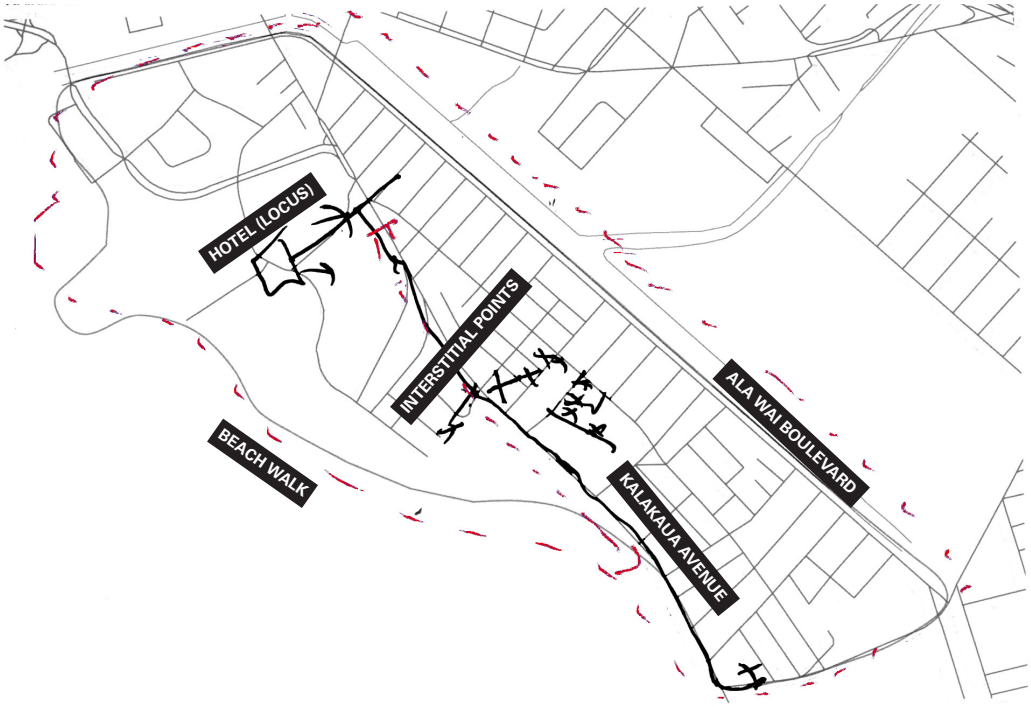


FIGURE 5-17 LAYERING VISITOR'S SKETCHES OF TRAVERSING WAIKIKI'S TERRAIN TOWARDS POINTS OF DESIRE AND DESTINATION

5-18



5-19

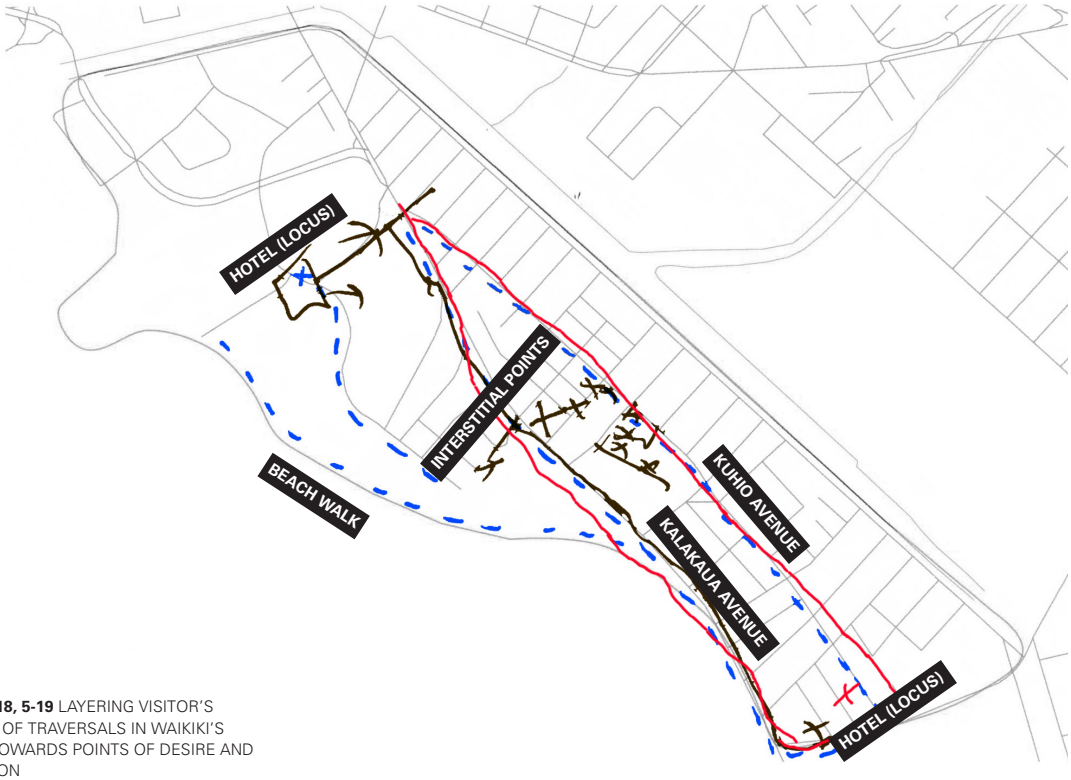


FIGURE 5-18, 5-19 LAYERING VISITOR'S SKETCHES OF TRAVERSALS IN WAIKIKI'S TERRAIN TOWARDS POINTS OF DESIRE AND DESTINATION

street corners, or mobile devices such as the iPhone, which can pin point your location. Other forms of communication used were bus maps, city maps, geometries of the built form, open spaces, and landmark buildings such as the hotels. In addition, the open spaces afford a way of orienting oneself within a spatial framework of habitable landscapes.

The visual form of a user's surroundings, such as the geometries that inhabit space in every built landscape can communicate differently; that is, everyone perceives things differently depending on one's perceptual frame of reference. The auditory cues of perception and orientation can be seen as environmental, and anything that is in the immediate realm of hearing, for example, asking pedestrians directions while experiencing the space, can influence the participant's movement to a point of interest or place of desire. The tactile forms of orientation can be maps that help seeing-impaired individuals find their way in the urban environment of the city; these mappings of the city can have tactility to allow the blind to feel their point of origin in relation to their destinations, streets, and open spaces. Unfortunately, I was not able to interview anyone who was visually impaired that used these tactile maps as tools of traversing the urban terrain. Furthermore, everyone that experiences space creates mental constructs, which are an assemblage of movements, shapes, smells, sounds, patterns, or tactile responses from the environment, and an orientational cue for traversing the terrain to find destinations.[145]

145 Robert Jacobson, *Information Design* (Cambridge Mass.: The MIT Press, 1999), 108.

5.7 WAIKIKI AS CONSTRUCT

Waikiki is a composition of parts that allow the user to perceive and map while traversing its terrain. An image and mental mapping affords the user the ability to traverse while discovering points of interest along the way. This perceptual construct of the site or origin gives visual, auditory, and tactile cues for anchoring meaning. In Waikiki, the beaches, Diamond Head, the strip of stores, and restaurants give this orientation of direction along paths that lead to specific points of desire. These places are destinations and interpretations by the user of the urban condition, therefore, a mental image that we project of 'place' that needs further explanation for our understanding. Using Waikiki as a testing ground for exploring, discovering, and interpreting, reveals a mental and physical pattern or structure. This construct of perception, articulates movement, direction, and points of purpose and goal, a crucial element of finding one's way in the built environment.

primary elements

These prominent elements give the most utility because they represent the modes in which the user can benefit spatially and master their domain. The primary parts create a dominant image in the perception of the user; however, this image is in constant flux, which no Euclidian logic can sort. In the experience of space and place, the most important, or even crucial, is the path one takes to his or her destination; it is riddled with twists and turns of perception and movement. Yet these conditions of paths, nodes, domains, and points of reference give a sense of closure, thus, creating an identity of specificity while anchoring

"I LITTLE BAR WITH A COLD MAI TAI OVER LOOKING THE WATER WITH A SMALL BAND PLAYING SOFT MUSIC IN THE BACK GROUND, **BECKONS** ME."
(WAIKIKI VISITOR)

meaning of place through its composition of parts or members.

secondary elements

The spatial intervals of the terrain influences the user's ability to traverse, but in a subtle and indirect way. These nuances of the everyday are embedding patterns of impulse and desire, which the visitors encounter and find. In Waikiki, the inhabitant or tourist tries to find specific destinations through the use of maps given within the context of the site. These maps denote specific features of the terrain with color, type, line, and perspective. This gives an overview of its area, its enclosure, its open space, and its paths of bodily or mechanical movement. On a connotational level, it could reveal something, other than what is on the surface of representational map. For instance, the baggage of past experiences and the dissemination of information about the place influence the traveler's perception of the destination. The secondary points; open spaces, smaller landmarks such as statues, lifeguard stands, can give a sense of orientation, direction, and even location. **(figure 5-20)** Furthermore, the perception of views and images in which the traveler must encounter or pass is informing the spatial experience, so that they can inhabit, converse, and practice on a routine basis, seamlessly.

tertiary elements

Some of the tertiary points that would benefit Waikiki, however, are not seen or understood. The maps that help users identify things in the urban terrain for navigational purposes, are crucial for creating paths that engage all demographics of inhabitants, thereby, designing different mappings and

5-20

FIGURE 5-20 WAIKIKI IMAGE: LIFEGUARD STAND ON WAIKIKI BEACH (EXPLICIT OR IMPLICIT POINT)

interfaces, which respond to different senses of perception. Human senses, such as, tactility of the hands, visibility of the eyes, and taste or smell of the mouth and nose, is a consideration for navigating people through space to their destination. The elements that bring the user to his or her place of desire, such as restaurants, hotels, beaches etc., are communicating through the minor conversations and interactions of the inhabitants or users, which also embody ephemeral maps and images found on location to direct movement and experience.

conclusion

Waikiki allows for many ways of traversing the terrain, through these wayfinding instruments that guide the traveler such as maps and brochures that sometimes is distracting and disorienting. The tourist setting out on journeys without specific points of interest sets up a wandering approach that creates spontaneous and unknown results. Yet the traveler continues and discovers along the way towards points, within a spatial matrix of unknown desire. Indeed, the physical act of moving or traversing a terrain, to arrive at a specific destination of desire, is a manifestation of place. One has to conceive the notion of movement before one can arrive at a point of desire. Thus, the users mental and physical ability of traversing the terrain lends itself to finding, experiencing, and encountering the spatial matrix of desire. Moreover, the traveler's spatial experience is prior to the act of wayfinding, such as finding the point of desire in the urban matrix, a motility of the body in space, through spatial constructs of movement and rhythm.

06
CHAPTER

INTERPRETIVE AND EXPERIENTIAL MAPPINGS OF WAIKĪKĪ

CHAPTER 06 : INTERPRETIVE AND EXPERIENTIAL MAPPINGS OF WAIKĪKĪ

The point of this interpretive study on mapping is to gain an insight into the nature of how the visitor finds his or her way. What helps them form cognitive and perceptual maps, of either spatial or sequential information? And how do interpretive maps of observation, evidence collecting, such as brochures, and surveying, help in this notion of the user finding points and things in the environment? These mappings can synthesize form and reveal representations of traversing Waikiki's terrain by the user. A narrative that assumes specific points of departure and arrival, therefore, produces a mode in which one can experience spatially, through the human senses. This will allow an interpretive analysis of form and sign to communicate specific findings in the terrain, which will lead to a broader definition of Waikiki's urban tropical landscape.

The perception of the visitor or traveler to an extent already has notions of what to expect, but they can change upon arrival. For example, in Waikiki the maps, brochures, and travel books can communicate specific ways of finding. These tend to bring about discoveries and opportunities; for instance, among the users of the urban terrain. Finding points of destination with different tools, such as maps, brochures, or mobile digital devices, affords one a sense of direction and spatial orientation.

6.1 EMBEDDING WAIKIKI AMONG REGIONS

The idea that Waikiki is among other regions or districts, is known, but these places play their own role within an 'enu-

6-1

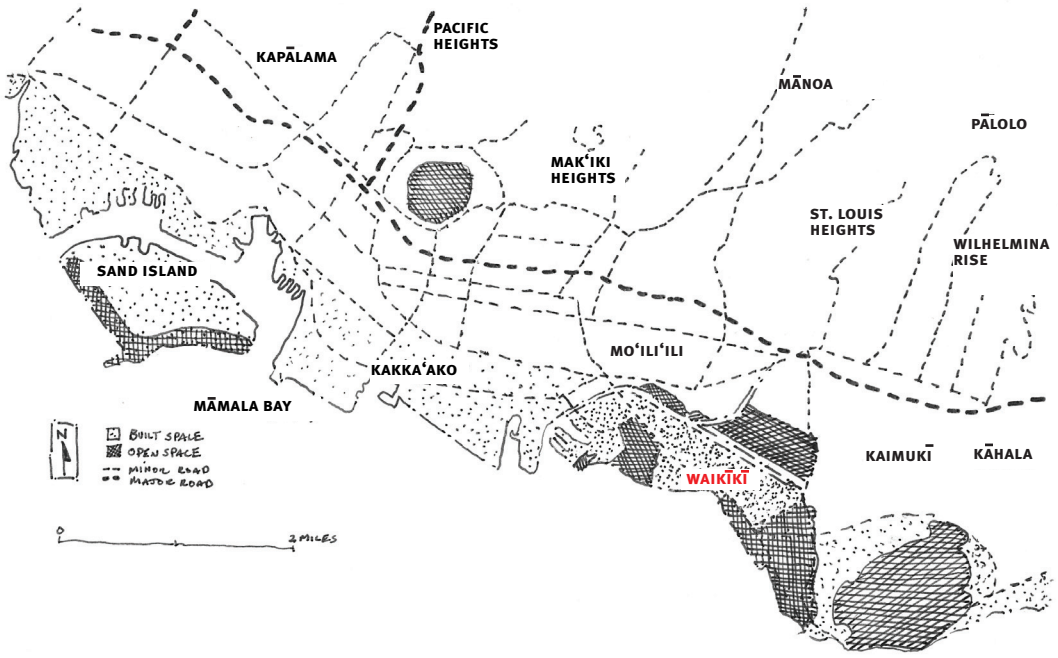


FIGURE 6-1 INTERPRETIVE MAP: REGIONS

meration' or listing of parts; for example, the surrounding regions of Kaimuki, Kakaako, Mccully, and Moiliili help to define it.**(figure 6-1)** These regions are defined on maps, but the boundaries are psychological, which help to give cognitive presence to each site, allowing for a mental representation to form in the mind either spatially or in a linear fashion. The surrounding area defines the site of Waikiki and gives it a differentiation among the other places, allowing the traveler to find it, traverse it, discover within it, and eventually map it.

Waikiki's system of elements

This sandy strip experience of Waikiki brings the visitor back again and again, but why? Is it because of the alluring tropical white sands and cool breezes of the mid-pacific? Or maybe it is a combination of the senses that are stimulated, such as the tactility of specific objects and texture in the environment, the smell of the ocean air and taste of the local cuisines, thus defining the mental map or schemata of the traveler. The hotels help in this mental representation of place, especially the Moana Surfrider Hotel built in 1901, which was the first of its kind in the area. This particular hotel is a landmark of Waikiki, a memory of what was and is today. This tourist destination is one of the "most densely populated places on earth",[146] a place to wander and experience the beach life, similar to an "outdoor strolling mall",[147] that allows for interaction with others while moving and experiencing the spaces. In **figure 6-2**, this map represents Waikiki's paths of bodily and mechanical movements (the dash line), points of desire (circle, square, and star) and open space (shade of grey).

146 Robert Nilsen, *Hawaii: The All-Island Guide.* Emeryville (Calif: Avalon Travel, 2001), 845.
147 Ibid., 849.

6-2

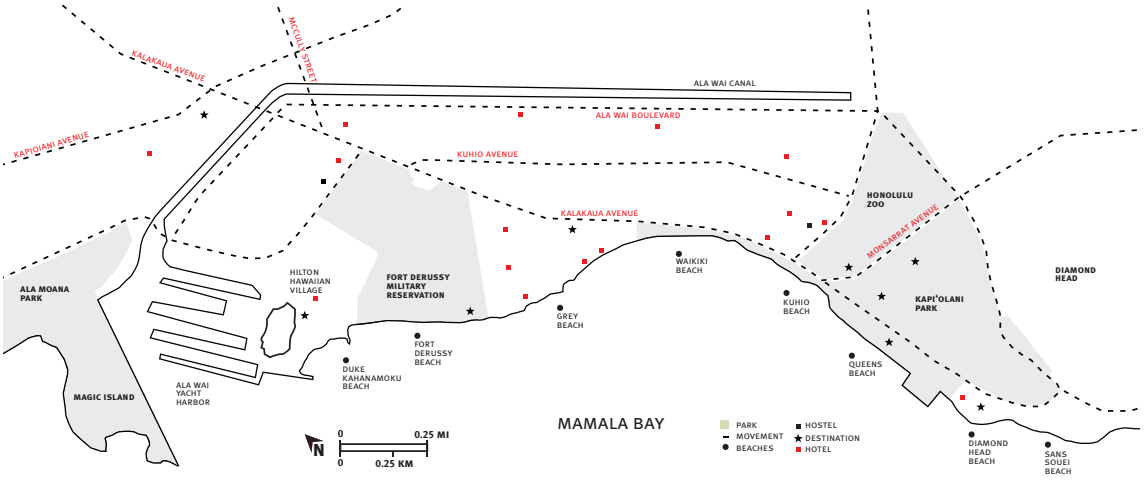


FIGURE 6-2 INTERPRETIVE MAP:
WAIKIKI DESTINATIONS

Waikiki's sandy paths, such as Kuhio and Kalakaua allow for encounters with the local artists, performers, and street people, which are similar to a "carnival midway"[148] of amusement, wonder, and desire. These paths are for both vehicular and bodily movements, which bring different perceptions of place because of velocity and direction. Walking affords the user the time to digest the spatial and informational cues of an environment, while driving gives the user external views at different velocities rather then the internal local proximity of bodily senses.

6.2 PRIMORDIAL CUES OF ORIENTATION

What are the primordial cues of Waikiki? Do they afford the traveler the luxury of orienting themselves to the terrain? If so, then maybe, through a study of its topology, its surroundings, its sun path, its edges that create the beach and canal, and its built landscape, an understanding can be grasped. This topological analysis of the terrain is based on the assumption of relations, such as, proximity, separation, succession, closure, and continuity, which gives substance to experience of place.[149] Each element of the terrain communicates to the user, a difference of means and modes. In **figure 6-3**, the sun path gives orientational direction of east to west, if you follow it in the sky. The ridge of Diamond Head Crater, a landmark—in the scene of Waikiki's postcard, creates part of the enclosure; it differentiates itself from the water's edge while still being a beacon for orientation by travelers and off shore sailors. Most importantly, the terrain has variations

148 Robert Nilsen, *Hawaii: The All-Island Guide.* Emeryville (Calif: Avalon Travel, 2001), 845.

149 Christian Norbert-Schulz, *Existence, Space And Architecture* (New York: Praeger, 1971), 18.

6-3

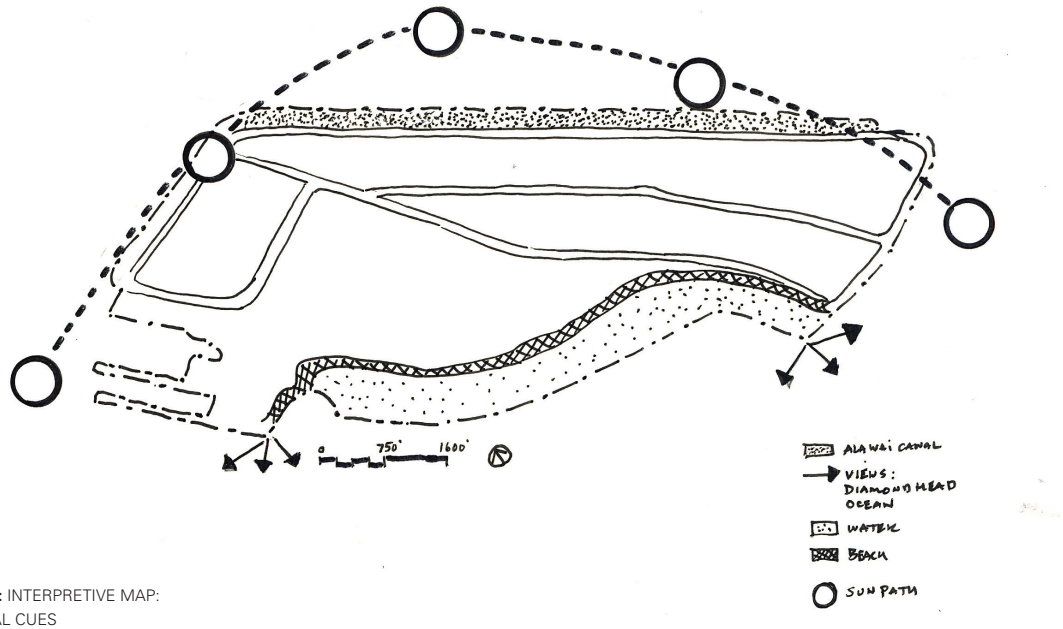


FIGURE 6-3: INTERPRETIVE MAP: PRIMORDIAL CUES

in slope and direction in paths of movement, that is it serves to guide the pedestrian to his or her place of interest at different degrees.

landmarks and edges

The water's edge in Waikiki gives the pedestrian the ability to traverse and move along it while using Diamond Head as a landmark for direction. In **figure 6-4**, this interpretive map represents the paths of bodily movement along the water's edge (dotted line) and mechanical movements of automobiles, etc. (dash line). Diamond Head (hatch line) is represented as a possible cue of orientation and destination. It is a focal point of perception, which helps guide the user through the space; however, the beaches are communicating information as well.

These spatial cues that influence our perception are found in the built environment; for instance, Waikiki's eight beaches give a distinction from the whole sandy strip, affording the user a place among its seemingly identical surroundings. Each beach, such as Duke Kahanamoku Beach, Fort Derussy Beach, Grey Beach, Waikiki Beach, Kuhio Beach, Queens Beach, Diamond Head Beach, and Sans Souei Beach make up the larger destination of Waikiki's water's edge. This is an edge that encourages movement, such as walking or running; the direction is a product of observing Diamond Head in the background. You can look eastward and see the crater from pretty much any spot in Waikiki.[150] Western sailors and Hawaiians have been using this landmark for orientation, direction, and symbolic

150 Robert Nilsen, *Hawaii: The All-Island Guide.* Emeryville (Calif: Avalon Travel, 2001), 850.

6-4

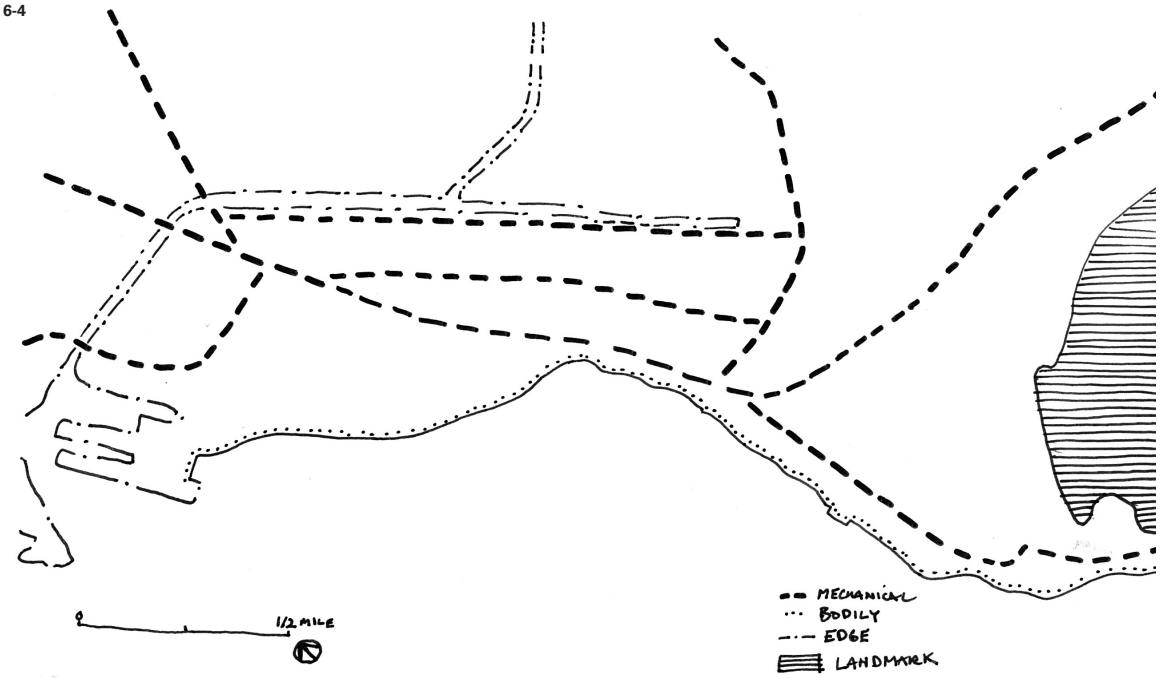


FIGURE 6-4: INTERPRETIVE MAP: WAIKIKI PATHS OF MOVEMENT (MECHANICAL AND BODILY)

representation since the earliest days of contact. Diamond Head was considered at one time to have diamonds but later found to have calcite crystals. These spectacular geographic features influence our perceptions of place and its spatial qualities. The environment of primordial cues, such as the markers of meaning that the user assigns to the given terrain, signifies cues or 'foci'[151] in the landscape.

6.3 AMOEBIC EDGE AS DESTINATION

Waikiki's circulation of people tends to flow into the water, which creates a permeable edge condition. This condition allows the user to move from the solid to the fluid, an amoebic transition from one state to the next when the user traverses both terrains, for example in **figure 6-5**, the people move from the destination of land points to the water points. Multiple traces of movement by the users, represented by dotted lines, are seen overlaid on the image captured. This representation gives an idea of the spatial experience and movement from land to water on the beach; however, these points of desire are found by traversing the water. Moreover, the bodily movement in water, such as swimming, surfing, paddle boarding, and snorkeling helps to get them to their spatial point of desire.

6.4 DESTINATIONS AND ENCOUNTERS

The idea of getting lost, even a notion of losing your way, can cause distress and confusion. For example, encountering things unexpectedly, 'along' a path of trajectory or 'way' is crucial to discovering points that are not determined or under-

151 Christian Norbert-Schulz, *Existence, Space and Architecture* (New York: Praeger, 1971), 19.

6-5

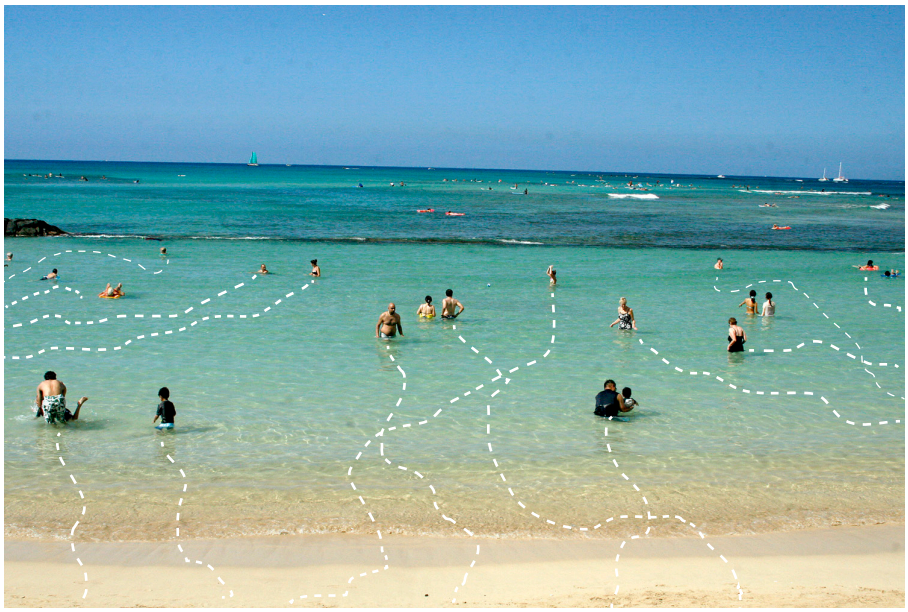


FIGURE 6-5: INTERPRETIVE MAP: TRACES OF MOVEMENT IN THE WATER: AMEBIC EDGE

stood, but are seen as part of the 'surface' of the terrain that we traverse. We will, perhaps, find some meaning in the paths that make up the urban environment of different places, such as Waikiki's strip experience, that enables one to traverse along the water's edge, and encounter all sorts of almost circus-like happenings. These instances create an image of place, thus, allowing an existential moment or 'meme' to form, that gives identity to the site as a 'domain' or a closure in mental, physical, and digital space.[152] These domains and points in space give meaning to the environment in which we find ourselves traversing on a ritual basis; however, these spatial cues can become unknown and unpredictable at times.

152 Christian Norbert-Schulz, *Existence, Space and Architecture.* New York: Praeger, 1971, 23.

Is the traveler part of a site that they inhabit? Do travelers belong to a larger global network of movement? A system of traversing space has many modes that are mechanical or bodily in nature. When we travel we usually have to bring baggage, physically and mentally, in order to make sense of our surroundings, which are in a constant flux. But this is a question of how one can traverse globally and traverses immense space, and how they can still operate, think, and decipher in the space they inhabit. Most travelers do use maps, signs, and digital devices that give exact location, through a global positioning satellite (GPS). We still get lost and need direction, giving the user of the urban framework, the pleasure of finding and discovering places of interest, along the way to their destination or place of

6-6

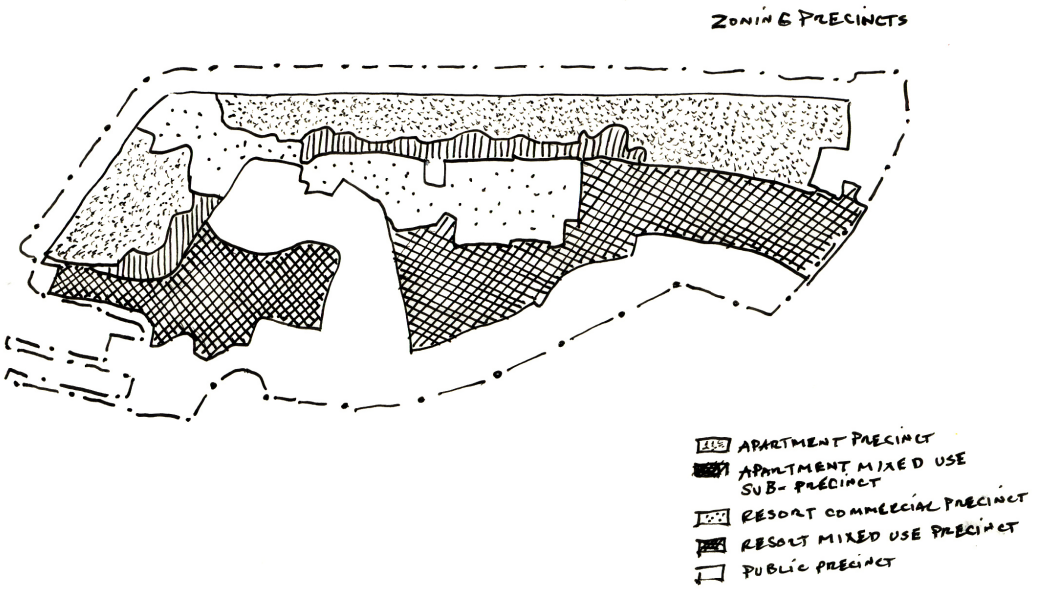


FIGURE 6-6: INTERPRETIVE MAP: ZONING: COMMERCIAL AND PUBLIC SPACE

desire. In Waikiki, the terrain is divided into zones such as commercial, residential, and public, this tends to favor the tourist and traveler by giving them views of the ocean and beach from the resorts.

In **figure 6-6**, the zones or parts of Waikiki such as the residential (apartments), and commercial (resort hotels) are in different proportions to each other; however, the resorts and hotels take advantage of these views and beaches, which are the tourist's explicit points of desire and destination. These commercial entities are prescribing an exotic destination and inscribing the visitor.

The inherent qualities of place such as its position to the sun, its geographical features, its proximity to other places that differentiates it, and its psychological affects on the observer entail a thorough understanding of goals or destinations. Finding our way to points, which peek our curiosity, creates a place of fulfillment. This is not always the case because traversing paths in a specific direction might not lead to the goal of intention, but an unknown point in the terrain. This unfamiliar zone or domain is a point in space that brings activity and movement. These are unknown of junctures of axis with 'departing points' of contact among the user's spatial environment.

6.5 TRAVERSING WAIKIKI'S TERRAIN

An empirical study of Waikiki entails observing and experiencing these multiple points that the visitor encounters and discovers while traversing. For example, the tourists and travelers create a spatial matrix of desire, which has a narrative of trajectory and impulse. Yet this spatial movement reveals a complexity of action and desire embedded within its terrain. Further, by inserting myself into Waikiki as a participant in the act of traversing, finding, encountering, and experiencing the terrain, a narrative of trajectory takes shape. These points of destination and desire manifest as one traverses an urban landscape, creating a narrative of intent and motility.

For instance, I inserted myself into Waikiki, I had no plan, just to document what I experienced there. First, I found a parking spot at the zoo, which was unmetered and free. Second, I traversed the terrain towards the Starbucks on the corner of Kalakaua Avenue. What I found there were people, either residents or travelers hanging out for the bus and waiting to cross the street. These spots were more of a nodal points then anything, an interstitial place between the modes of movement and destination but a desirable place to be experienced nevertheless. Further down on Kalakaua Avenue, I made a right turn on to Kuhio Avenue, there I encountered impulsive points of desire that one could participate in, for example, these people were creating points at which they can direct the tourist towards a specific destinations. Some of the soliciting points are people wearing signs, which explicitly communicate a destination such as the gun range, is far from a typical place or destination in Waikiki. I found it funny and interesting at the same time but I did not let it control my trajectory–neither of the massage walking advertisements was persuasive either.

So, I kept walking on Kuhio Avenue until I became hungry and stopped at the Shore Bird for lunch, I had a Turkey Wrap and a Mai Tai–on special for $3.50. This was an explicit point for viewing the sunset and enjoying a drink because it is on the beach located in the lobby of a hotel. After that I left and sat in the lobby for an hour and rested, a place where most travelers find themselves gravitating towards when staying in Waikiki.

I started out again traversing the terrain of Waikiki, but I soon craved chocolate and caffeine, so I stopped at Moana Surfrider cafe for coffee and a large chocolate-macadamia cookie. I sat in the small cafe, with coffee in hand and an eye on the pedestrians outside a large window. I was gazing and pondering the points of desire, which I had found in my wanderings of Waikiki. These small spaces create an intimacy that the visitor inhabits and makes sense of when visiting exotic or unknown places.

When it was sunset, I noticed people gravitating towards the water's edge to take photos and use it as backdrop. The experience is a sublime moment for the viewer or tourist, a glimpse into something that is infinite and timeless, an impulsive point of experience.

As it became dark and the lighting in Waikiki's strips became more pronounced, a spectacle of performers inhabited the Kalakaua strip. They composed of musicians, artists, and entertainers, which give the traveler an unexpected or impulse to stop and gaze, maybe even to participate in the spectacle. One performer was a statue that only animated if a donation was triggered or given; usually the tourist took photos with the performer. Also, while walking on Kalakaua Avenue, I encountered gypsies that can tell fortune, parrot tamers, pot sellers, bead makers, and cartoonists, all trying to make money and give an explicit experience to the visitor. Through an experiential traversal one finds instances of buying souvenirs while moving to locations of destination and desire.

Later that night, I went to Cabanas Pool Bar, which is on the roof of a hotel, on Kalakaua Avenue. It over looks Waikiki's strip. From this vantage point it affords the visitor a perspective from up high, that is, seeing the street activity of entertainers–the impulsive points of desire, to the encountering of more explicit signs, i.e. the ABC Stores.

multiplicity of points

Waikiki's spatial matrix of desire is multiple; it's a compilation of points that influence the visitor while traversing the terrain. These matrices of points are explicit, implicit, impulsive, and interstitial of the site in which they are embedded. Thus, these stops along the way influence, inspire, and trigger curiosity, however, these destinations give practice and ritualization to the visitor when traversing.

In **figure 6-7**, for instance, the multiple points of desire are photographed, categorized in a grid to expose the explicit, implicit, impulsive, and interstitial points, which the visitor locates, discovers, and encounters along the way.

These points of desire and encounter within the terrain are multiple, affording

6-7

SPATIAL MATRIX OF WAIKIKI: **MULTIPLICITY OF POINTS**

FIGURE 6-7: SPATIAL MATRIX OF WAIKIKI: MULTIPLICITY OF POINTS (EXPLICIT, IMPLICIT, INTERSTITIAL, AND IMPULSIVE)

the visitor different points of interest and destination. Explicit points announce their position in space, such as the ABC stores, ATMs, hotels, bars, and beaches. The interstitial and impulsive points are experiences of movement and exploration of the terrain, while having an itinerary or spatial practice of routine. Traversing Waikiki's Kalakaua strip, you can discover interstitial points of entertainment and influence; for example, the street entertainers create a unique experience by performing as statues, cartoons, or posing for bird photos. Entertainers become these spatial impulsive points in which the traveler or tourist encounters, again and again, continuously on their trajectory to a destination. Further, the interstitial spaces that make up the matrices of desirable spatial movement are multiple, that is, each interstice creates a relationship with the visitor, for example, its curbs for sitting, its corners for thinking or talking, its roofs for shading, and its fences for art. However, these spatial points alternate, that is, each position within a spatial matrix embeds a degree of oscillation and rhythm, depending on one's interpretation and desire, a spatial instance in the fluctuating terrain.

6.6 PSYCHOGEOGRAPHY AS MAPPING

In Waikiki, the "psychogeography"[153] or representation of one's image of place affords different perceptual views of the environment. In **figures 6-8** and **6-9**, both maps are fragmenting Waikiki so that they reposition themselves depending on the

153 Simon Sadler, The Situationist City. Cambridge Mass: MIT Press, 1998, 77.

6-8

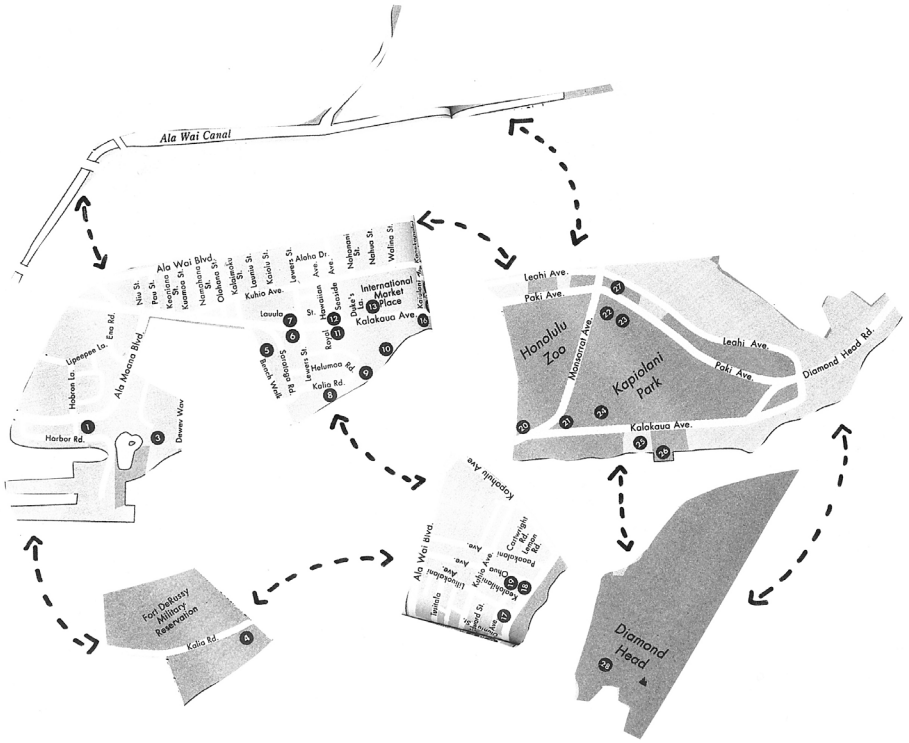


FIGURE 6-8: INTERPRETIVE MAP: PSYCHOGEOGRAPHY OF WAIKIKI (MENTAL MANIFESTATION)

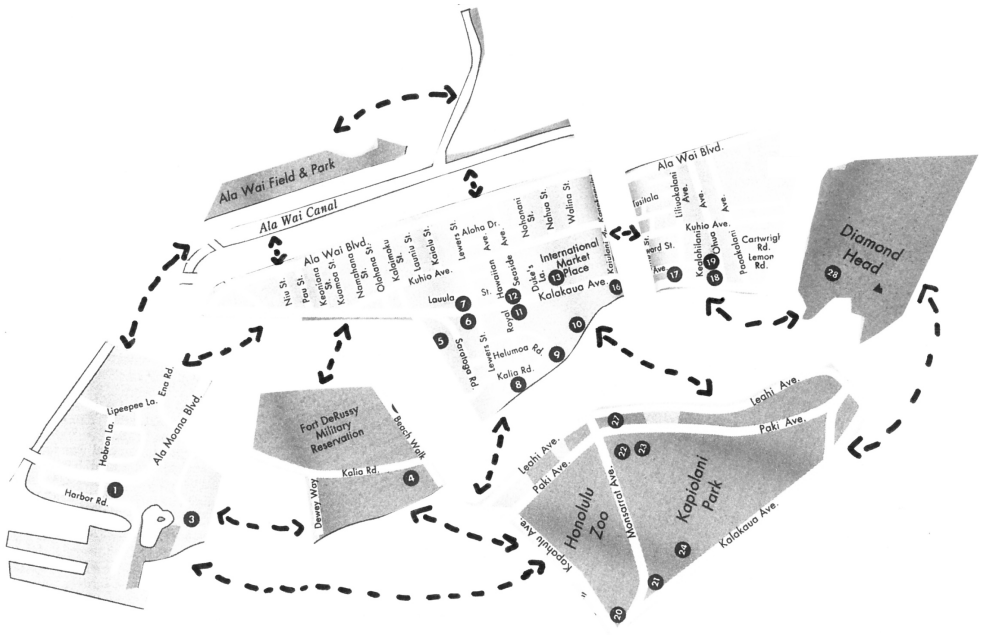
"unities of atmosphere"[154], which gives a motivation for traversing the city's landscape. Both maps are manifestations brought together with its axes and paths for pedestrian movement. Indeed, these "psychogeographic hubs"[155] or points give meaning to ones perception of a particular location and its connection to the overall 'being' of place. A being or spirit of place, such as in the "genius loci",[156] gives a destination or point along the way in meaningful space and concretizing form in relation to the user.

The user moves from a point of departure among points of constant change and oscillation. These movements in metaphorical states enable points of reference and continual mental flow to penetrate the destination path. In other words, the unpredictable nature of drifting or passing through urban space, can be an open-ended experience, creating mappings and manifestations of traversing that represent multiple points, trajectories, and instances in the terrain. For example, both maps are manifestations from traversing Waikiki's terrain as either a traveler or tourist. These improvisational movements give impulse, to points of instance, which the visitor discovers within a spatial network of desire.

Travelers in the built landscape move, stop, and adjust direction depending on the senses of the individual, simultaneous-

154 Tom McDonough, ed. Guy Debord and the Situationist International. (Massachusetts: MIT Press, 2002), 248.
155 Ibid., 248.
156 Christian Norbert-Schulz, *Existence, Space And Architecture*. New York: Praeger, 1971, 32.

6-9


Ala Wai Field & Park
Ala Wai Canal
Ala Wai Blvd.
Niu St.
Poni St.
Kapiolani Blvd.
Kuahelani Ave.
Kalakaua Ave.
Kuhio Ave.
Lauula St.
Royal Hawaiian Ave.
Seaside Ave.
Lewers St.
Kaiulani Ave.
Nohonani St.
Nahua St.
Waiina St.
Aloha Dr.
Kalaimoku St.
Lanuia St.
Kalaola St.
Olohana St.
Namahana St.
Kaiolena St.
Kaiolu St.
International Market Place
Duke's Lane
Ohua Ave.
Kanekapolei St.
Kaiolena St.
Kaiolu St.
Kaiolena Ave.
Kaiolu Ave.
Kaiolena Ave.
Kaiolu Ave.
Kaiolena Ave.
Kaiolu Ave

ly creating points of action along the prescribed path, which these become part of a larger framework of circulation and nodal interaction. This nodal action that occurs in these particular instances brings about relationships within the context of the users perception and is metaphorical in nature rather than in Euclidean or exact distance. The mind of abstraction and vision is metaphorical in nature; it distorts and simplifies the human perception and cognitive ability of the user.

"Psycho-abstractions" or mental imaging directs the user through space while taking in the context of the site. These participants create traces in the natural and urban landscape. These cognitive maps are representations that are not whole images, rather an interpretation of information, creating meaning of specific spatial points that one isolates and finds. These tools for finding one's way, manifests meaningful relationships with specific points of desire. For instance, these tools help find the desirable spatial point and the path to traverse towards it. These points of interest embedded in the terrain communicate information–tangibly and digitally, to the traverser. This symbiosis of mind with place merges its context, its direction, its action, and its interaction together in a point; however, this 'foci'[157] is seen as a place of interpretation. For example, this process of mapping the 'drift' through Waikiki can allow one to analyze perception and metaphorical points of reference. The users cognitive and perceptive ability helps to orient while identifying through an assemblage of acute senses, but if lacking, this may pose a challenge.

157 Christian Norbert-Schulz, *Existence, Space And Architecture* (New York: Praeger, 1971), 23.

conclusion

Interpretive mappings play an important role in differentiating how someone moves in space. Throughout the world, most terrains in urban centers or cities, such as Waikiki, a place of exotic exploitation and image making, is seen as a construction of landmarks or reference points for the user to navigate, find, and experience. The edges and the Ala Wai canal, to a greater extent, enclose the site giving it concretizing form and meaning. This can allow for orientation by the user, or, a degree of control through its paths of movement, such as its walkways, motorways, and bikeways throughout the site.

Movement of the traveler, through space, along paths, results in traces that become "figures" in the landscape or "ground", which one can map and represent.[158] It is, therefore, clear that mapping known and unknown terrains can lead to new information about the site. Representing elements of the terrain, for instance, tells a narrative, a string of experiential spatial motility of the body. These interpretive mapping attempts are to capture this multiplicity of points in the terrain, but in a quasi-objective manner, such that a subjective creative approach–on my part, intertwines. Furthermore, these mappings express (in graphic form) what happens in the terrain, from a visitor's cognitive ability, to traversing and encountering multiple points in a spatial matrix of desire.

158 Christian Norbert-Schulz, *Existence, Space And Architecture* (New York: Praeger, 1971), 23.

III

CONCLUSION

SPATIAL MATRICES OF DESTINATION AND ENCOUNTER

III SPATIAL MATRICES OF DESTINATION AND ENCOUNTER

As a student of architecture with a graphic design background, I had the opportunity to investigate wayfinding as a concept and tool, by traversing, interpreting, and discovering multiple points, within a terrain of knowledge. My initial interest was in the communication of signs in wayfinding, which helps one's direction and orientation while traversing a terrain. This notion of wayfinding and its evolution derives from the terrain's multiplicity of spatial points, a result of exploring and encountering within multiple matrices of motility. Indeed, this study made me evolve and look beyond, to the unknown, a realization of discovery, in the spatial realm.

The spatial matrix of desire is a system of points that comes before the wayfinding process, takes shape. One traverses towards multiple points of desire and destination, which embed themselves within the terrain, manifesting instances of discovery and encounter. Indeed, these spatial points alternate, one's explicit, is another's implicit, and one's interstitial is another's impulsive.

Have I found the lost world of wayfinding and can it be found? Wayfinding is in fact a cross-disciplinary and requires more then a single engagement, but multiple engagements of understanding and analysis. I find, I am on the edge of understanding and wayfinding is in a constant oscillation, from the cognitive to the psychological, to the technocratic of means. One discovers in studying wayfinding that it is multiple in structures, semantics, functions, and perceptions. Just when one thinks that they have a handle on it, there is something else. By way of study, it morphs, fluctuates, and oscillates in spatial rhythm, never revealing itself, but only through one's singular experience and perception of space and time. So, wayfinding can never be completed as a project of study because of its constant alternation of points within the spatial matrix of desire and destination.

discovering the spatial matrix of desire

The spatial matrix of desire is a framework of impulse, direction, motility, and spatial fluctuation in which one becomes embedded in the wayfinding experience. It is a place that urban planners, architects, designers, and other practitioners have a crucial role in creating, influencing, and understanding, but the spatial matrix of desire is multiple, and requires the participant's involvement to manifest these points of interaction. These spatial points are understood and traversed by the visitor in various modes of movement with the direction of wayfinding tools such as maps, brochures, road maps, travel guides, and portable digital devices.

The traveler or tourist depends on these tools for finding the way, however, the terrain can be misleading and confusing at times. If the tourist or traveler has knowledge of the destination by following maps, they can find anything that is of desire. The maps in these dense environments, such as Waikiki curbs the movement of the traveler and tourist in finding their points of desire, an explicit framework that is given, but with multiple points of encounter along the way.

multiplicity of matrices

The spatial matrices of desire are multiple some are official and others are unofficial. The explicit points are seen in Waikiki's tourist maps, and the other interstitial or impulsive points are unmapped and considered encounters or discoveries by the visitor on route to a destination. Impulsive in nature, these points are implicit of site, which occur in relation to temporal events, in a sequence of finding and seeking. These spatial positions can be seen as layers in which different modes of movement and awareness take place, for instance, the explicit, implicit, interstitial, and impulsive points give the visitors multiple experiences of desire. Yet, within this multiplicity of spatial matrices that a visitor encounters, a sense of discovery can shape every instant of experiential movement while traversing space. But, these spatial points are alternating and oscillating in direction and spatial location. Thus, never allowing one to locate the exact point, from the impulsive to the interstitial, or from the explicit to the implicit.

Wayfinding reflects instances of motility, seen to occupy spatial points in multiple forms. These spatial networks of destination embed themselves into networks or matrices, which enable streams of movement to merge and cross. This creates alternative points of desire and impulse, which the visitors traversing encounters and experiences.

Spatial matrices are multiple, composing of mini matrices, within mini destinations and mini desires. Each spatial point creates and manifests an explicit, implicit, impulsive, or interstitial experience of desire and destination. These points in which the traverser finds, encounters, and discovers within the given terrain are embedded within a multiplicity of instance and trajectory. Further, the nature of traversing, finding, and experiencing the spatial matrix of desire is a multiplex of points, which affords the tourist and traveler an ability of experience an unknown terrain.

mini matrices

The mini matrices of desire and destination can be experienced within a more monumental or explicit framework of traversing. Waikiki's terrain, for example, is understood through the maps that are made available to the tourist and traveler. These explicit points of desire, i.e. maps given, take the form of clubs, restaurants, hotels (that become a locus on which to find other destinations), beach spots, stores, bars, and other official points of destination. The explicit and monumental matrix includes between its interstitial matrices many implicit points or points of impulse. This spatial matrix gives the traveler or tourist to Waikiki multiple options of destination and desire, but these impulsive points are only found while traversing the terrain. Indeed, an encounter of interstitial experience and impulsive behavior on the part of the visitor is seen as multiple and frequent while traversing this sandy strip.

mini destinations

These interstitial points or mini destinations are in between the sanctioned points of desire, which create moments of impulse and unofficial inquiry, leading to discoveries. In Waikiki, these impulsive points or mini destinations are the places in which visitors can find without a map, however,

they can lead to something unexpected. Moreover, the impulse of finding points of desire, an act of momentary movement, thought, and trajectory is in constant flux while traversing the terrain. Yet, this multiplicity of points becomes embedded in the layers that enable different points to be uncovered and experienced by the visitor.

mini desires

Most visitors to Waikiki find desirable points of interest, either explicitly on maps given to them or implicitly by traversing the terrain. While seeking desirable places, the visitor finds points of desire in between, creating mini desires. These interstitial points are impulsive by nature, and act as momentary points of interest within the terrain. Indeed, the specificity of event and temporal addition gives insight to the point of location. This spatial point of interest and impulsive desire is an in between or interstitial space. Most mini desires go unnoticed, but they play a crucial part in the everyday experience of destinations.

remaining discoveries and explorations

The next landscape of wayfinding embeds itself in a multitude of disciplines and techniques. Such that, it could be seen as a tool for analyzing urban and architectural conditions or a mode of understanding the human condition in the built landscape by mapping movements, spatial trajectories, or some other unknown rhythm that permeates our habitation. For instance, these mappings of spatial trajectories, and unknown rhythms, which permeate our lives can manifest as tools and ways of being in the terrain. Thus, addressing issues of movement, and orientation to points of desire within a terrain of embedding oneself. However, these new techniques are cross-disciplinary and multi directional in cognition, topology, and motility. The essence of this multiplicity of movements and rhythms are inherent in the habitable terrain, which needs to be brought to the foreground of discussion in further studies of wayfinding and spatial investigations.

Wayfinding is like a slippery target, one can never get a grasp of its exact positioning and location. It is always moving and oscillating within one's realm of rhythm and cognitive projection. These cognitive realities are critical for the traverser while moving across space, time, and surface to find multiple points of desire and destination. One can envision a future that articulates these points from the interstitial to the explicit while understanding that one's desire is always in flux, and a subject of interpretation within the terrain of motility. Each inhabitant brings their own conceptual baggage, which influences their trajectory towards multiple points of desire, in a spatial matrix of impulse and rhythm.

One uncovers **explicit**, **implicit**, **interstitial**, and **impulsive points** within the spatial matrix by manifesting a structural narrative, with trajectory, movement, and destination. These movements thread into the multiplicity of instance, vector, and point, which alternate and flow, oscillating through one's traversal, within a temporality of spatial rhythm.

APPENDIX

THE CASE OF MANHATTAN

THE CASE OF MANHATTAN

The nature of wayfinding in Manhattan can compare to Waikiki, through similar structures of motility, from how visitors traverse, find, and experience the terrain, to how the built environment is setup explicitly. This case study will allow one to investigate how wayfinding manifests in the terrain. A visitor's spatial ability of traversing towards multiple points of destination, is a practice in the built environment. For example, how does the user of Manhattan's urban framework find their way? The physical act of traversing an urban terrain can allow for many decisions by the user, such as direction, vector, path, destination, district, node, and landmark, which affords a spatial orientation.[159] Each person that moves along a path towards a destination encounters obstacles and waypoints, which can influence the route of trajectory through the spatial syntax of the city. This case study will investigate how the user creates a "cognitive map"[160] or an image of the environment that he or she experiences, which informs the decision-making process of finding their way in the urban landscape.

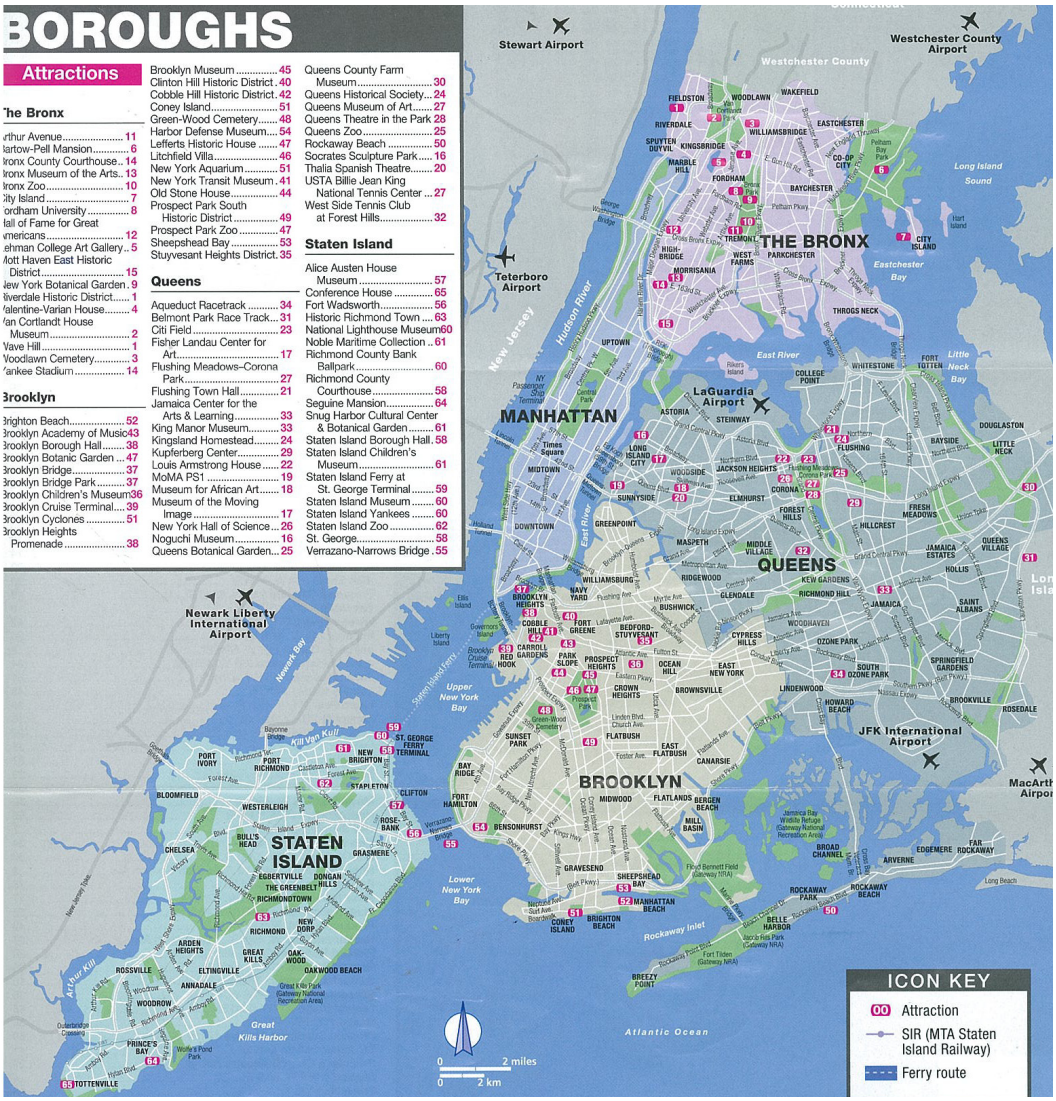
The act of finding one's destination and being able to orient the way back is a crucial part of mentally mapping or imaging the terrain for navigation. This spatial matrix of desire and destination is explicitly understood through the maps given to the tourists and travelers of both Manhattan and Waikiki. Both sites integrate a spatial system of points that create impulse and spontaneity among its practitioners of motility. In the case of Manhattan, a terrain of multiple points of desire, which interact, manifest, and create paths of traversal for the visitors, and forms an integral part of the built landscape. Further, this motility of the traveler and tourist gives meaning to the urban form of space, a movement of spatial projection, streaming and merging at multiple points of desire and destination.

revealing structure

By studying Manhattan's terrain, one can uncover a spatial network of spaces, which forms a structure of movement towards points of destination. These points are multiple, which create a matrix of punctuations in time, which one discovers and encounters while traversing a given terrain. Thus, the traversal of space through the built landscape triggers spots of impulse and discovery; however, these points are in a constant oscillation and flux. Most importantly, the terrain of Manhattan embeds these points of destination and desire within, enabling a spatial system of movement to manifest for the traveler and tourist in the urban terrain.

159 Kevin Lynch: *The Image Of The City,* Cambridge, Mass. 1960, 46-47.
160 Edward C. Tolman: "Cognitive Maps In Rats And Men,"In: *Psychological Review*, 55(4), 1948, 189-208.

01



02

FIGURE 01: MAP BY DAVID LINROTH INC.: NYC & COMPANY (MAY 2011)
FIGURE 02: WWW.NYCGO.COM/NEIGHBORHOODS

A. TRAVERSING MANHATTAN'S TERRAIN

Manhattan's terrain has a particular way-finding system, which allows one to traverse towards particular destination by means of foot, bicycle **(figure 04)**, train **(figure 03)**, subway **(figure 05, figure 06)**, helicopter, automobile, and ferry. These modes of movement are efficient and practical ways to move in this dense environment. Mass transit is a mode of transitioning through the landscape that gives a different perspective, then driving an automobile. Automobiles afford the user with an intimate interaction, such as, the dynamism of movement by giving the operator more control of direction and velocity towards destinations of desire, but with mass transit an interaction can occur while in movement. For example, people on the train can talk to each other and view the passing landscape that frames the train's window.

03

04

FIGURE 03: WWW.NJTRANSIT.COM (2011)
FIGURE 04: WWW.NYCGO.COM/MAPS (2011)

Manhattan's subway is an intriguing system of circulation that is beneath the surface. Similarly, the circulatory system in the human body, beneath the skin, creates these connections and nodal spaces. This comparison between the body and the city can be viewed as a metaphor of how the urban environment can be woven with human interaction. It's amazing how all these individual users have destinations and places that direct their existence on a day-to-day routine basis. Indeed, each user of the city's underground circulatory system projects through movements across space and across time, in rhythm to certain instances of destination and points of desire.

The subway is a mode of traversing the terrain that enables the user to be in any given point in Manhattan's landscape. These paths are labeled in the subway map **(figure 05, figure 06)**: numbers and letters corresponding to the destination, point of arrival, and point of departure. This mode of movement varies in velocity and trajectory, which gives the user of the urban framework an advantage over space and time. Perhaps, most importantly, is the mass transit system that enables the inhabitants to find their destinations with the least bodily energy possible, a mechanical traversal of distance.

modes of traversing

The modes of traversing the terrain in Manhattan's 13-mile long and 2 mile-wide island allows for many ways of movement. The streets that are part of the grid plan of 1811 giving the pedestrians the advantage of walking the city very easily either by foot

05

FIGURE 05: WWW.TERRA MAPS.ORG (2011)

or mechanical means, such as by bike **(figure 08)**, subway, bus **(figure 07)**, cab **(figure 12)**, ferry **(figure 8)**, and even helicopter **(figure 10)**. These means of traversing are crucial to the user of the city because it allows them to get to their points of interest and destination on a daily basis. These movements of the user are seen as paths that the participant traverses, which form

channels on which they form their image of the place.[161] Most channels of movement give meaning to daily itineraries through these modes of travel and exposure, to the terrain of the urban condition.

mass transit as metaphor

Mass transportation can be understood as a way to string together places and events, an itinerary of points that form a fabric of experience and impression. These spatial experiences are "modalities" [162], dependent on vectors, trajectory, and time variables. Movement from one point to another requires the projection of the body on a plane through space, from place to place. A system of connections can be similar to the memories of a traveler, traversing a terrain; each memory, and instance in space can string together with place as an anchor of cognitive meaning. Most importantly, this mode of transportation through space is a "metaphorai"[163] or string of text, which creates a narrative of enunciation in traversal. Each spatial point of encounter, impulse, and desire manifests multiple instances, which adds to the narrative of trajectory.

movement as transition of place

Transitioning through the terrain of Manhattan gives the notion of instances in time that fluctuate, and maintain a space of exploration for the inhabitant. These moments of perception are rich textures and layers of sedimentary memory that the user perceives as signals of direction from one place to another. This movement

06

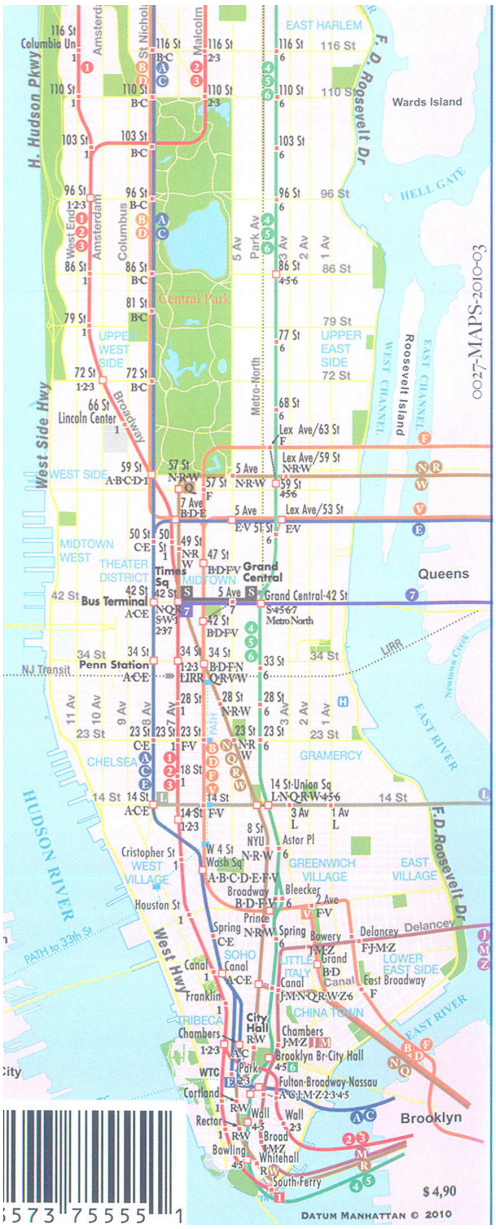


FIGURE 06: DATUM MANHATTAN 2010

of the user across the terrain of the urban landscape can be quite different from the known and familiar points of interest they previously encountered. A physical act of moving in a trajectory through space to points along the way can bring new experiences of place because every moment is a chance to enrich the participant's imagina-

161 Kevin Lynch, *The Image Of The City* (Cambridge Mass.: Technology Press, 1960), 47.

162 Michel De Certeau, *The Practice Of Everyday Life* (Berkeley: University Of California Press, 1984), 115.

17 I bid.,115.

tion. For example, in the urban framework of Manhattan the user encounters entrances and exits **(figure 11)**, which are instances of change by moving through the streets on foot or mechanically, which afford different perceptions of time due to the velocity that the user chooses.

Experiencing Manhattan from a helicopter gives the user a way of "seeing the whole"[164] ,which is the city's urban context as a "totalizing"[165] view of its intricate parts. These paths of traversing the terrain far above the city while looking down allow the user to experience a voyeuristic point of view. Similarly, Icarus flying above, escaped the devices of Daedalus in mobile and endless labyrinths below.[166] This elevation allows for a panoptic view of the interworking of the urban framework, a reading from far above, with a verticality of movement that inhibits the senses and transforms into a "texturology"[167], that is legible only to the user high above. A geometrical texture of verticals that the urban landscape produces and excites the senses of the user as a participant in its readability.

way losing as exploratory agent

When navigating the urban environment one can become lost and way-lose in which the user becomes disoriented in a given context. This exploratory agent of losing one's way can become an overload from the environment that fails to orient the user, but instead confuses and triggers cognitive overload. For example, in Manhattan

07

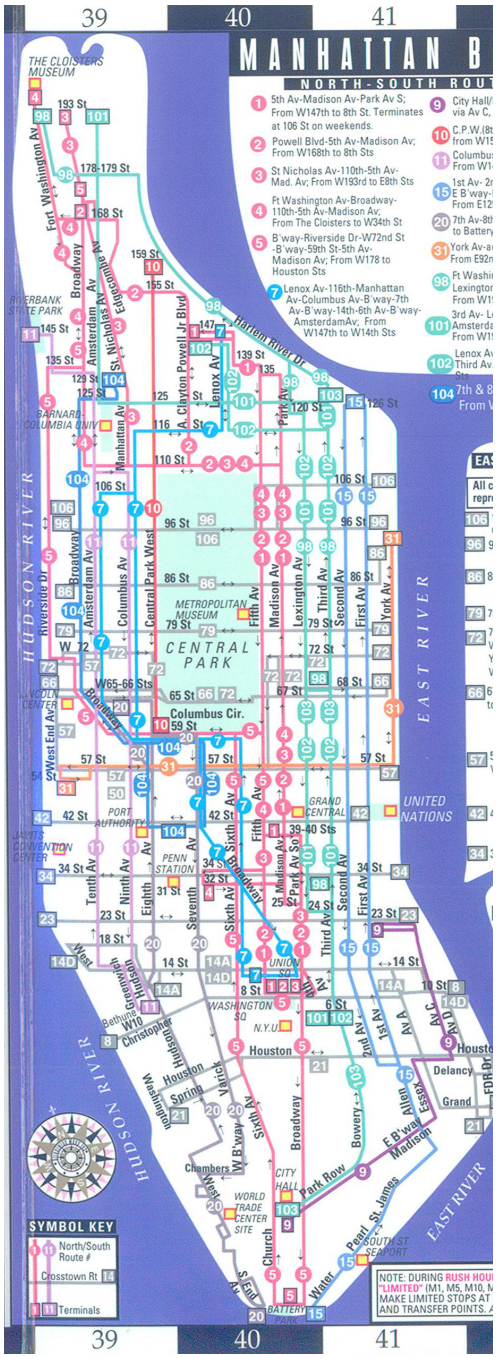


FIGURE 07: STREETWISE MAPS INC. 2011

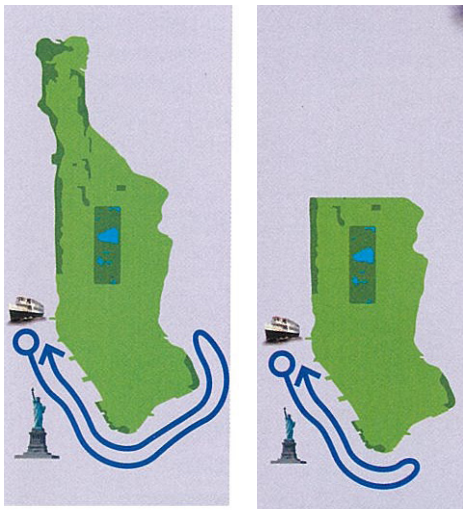
164 Michel De Certeau, *The Practice Of Everyday Life* (Berkeley: University Of California Press, 1984), 92.
173 bid., 92.
174 bid., 92.
175 bid., 92.

the circulatory system of the streets is a grid, from an 1811 design, but in certain parts it breaks from the grid into a more labyrinthine or organic plan. These sections of the city are located in Lower Manhattan **(figure 13, figure 14)**, The Villages, and Upper Manhattan. They tend to impose disorientation for the user or traveler of the urban context. The streets in these regions of Manhattan are places that direct the user in different ways, through twisted streets that vary in width and direction. These places deviate from the superimposed grid plan of the city, creating different ways that the user interprets the urban landscape.

Way-losing in Lower Manhattan **(figure 13)** is a potential outcome because of the street plan that was first colonized by the Dutch, then grew at an organic rate. Not unlike the northern European settlements of the times, these "irregular medieval street patterns", [168] gave a sense of curiosity with unexpected encountering. Similarly, the labyrinths and mazes tend to occupy this same notion of unpredictable outcomes that gives the user a mystery to uncover while traversing the terrain. This sense of uncovering and discovering points of interest in the unfamiliar terrain, gives the urban fabric a uniqueness that captures the user's improvisational experiences of the city.

The Villages in Manhattan also tend to deviate from the grid and break out of the imposed structure of a rational ideal plan.**(figure 13, figure 14)** These circulation paths are a little more organic and nonconformist from

08



09

10

FIGURE 08: CIRCLE LINE SIGHTSEEING CRUISES: WWW.CIRCLELINE42.COM (2011)

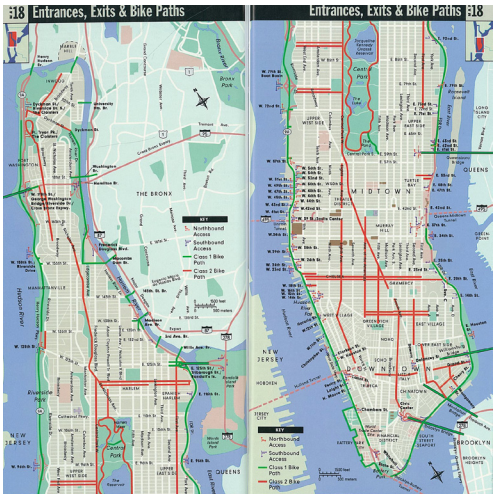
FIGURE 09: WWW.BIKENEWYORKCITY.COM (2011)

FIGURE 10: WWW.LIBERTYHELICOPTERS.COM (2011)

168 Elliot Willensky, White, Norval, And Leadon. *Aia Guide To New York City* (New York: Oxford University Press, 2010), 4.

the gridiron of Manhattan.[169] The Villages' allow one to traverse the mix of winding turns and dead ends of mediaeval streets, which encourages wondering and encountering things without a map or itinerary. Yet, traveling through this region the architecture can serve as spatial cues for the user while identifying points of desire or place within the overall spatial context. At first, the user can become disoriented because of the streets orientation and authentic medieval layout.

11



way-making and waypoints

Wayfinding is crucial to two-dimensional and three-dimensional form. For example in **(figure 15, figure 16, figure 17**, **figure 18)**, most systems or maps of orientation bring architecture, urban design, and graphic design together as a communicative tool under one umbrella for the user. Most importantly, it's an integration of graphic and geometric means, which allow the user to traverse a terrain and find their destination while encountering new experiences along the way. This notion of way-making leads to new and unexpected results in the itinerary of the tourist or traveler. Thus, bring-

169 Elliot Willensky, White, Norval, And Leadon. *Aia Guide To New York City* (New York: Oxford University Press, 2010), 4.

12

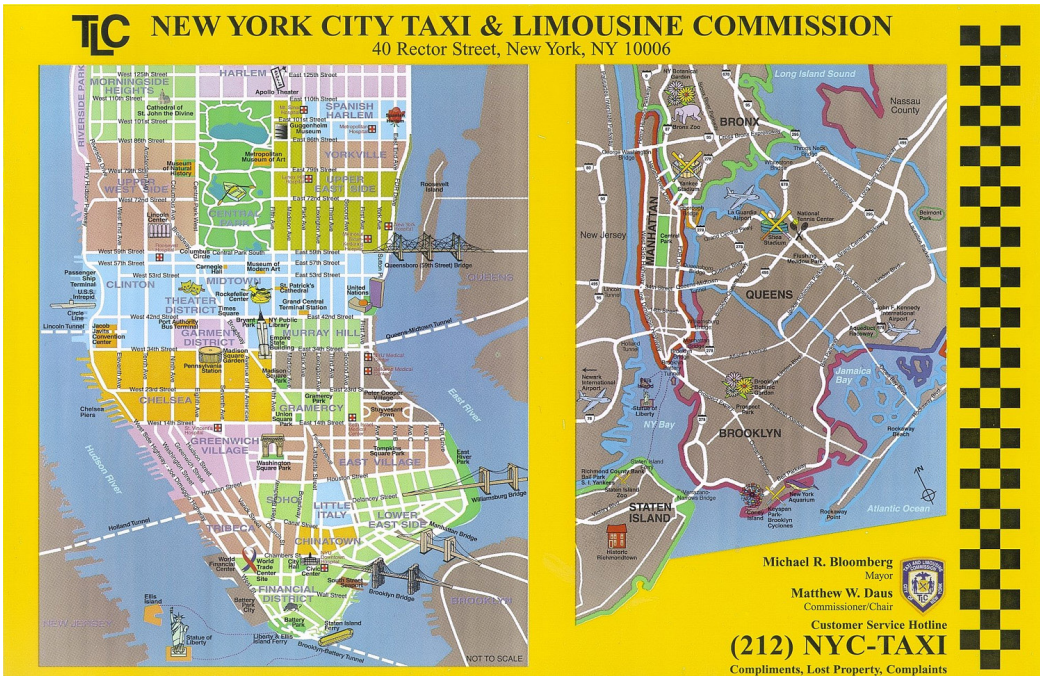


FIGURE 11: FLASHMAPS NEWYORK : WWW.FODORS.COM (2011)
FIGURE 12: WWW.NYCGO.COM/MAPS

13

14

FIGURE 13: ALLIANCE FOR DOWNTOWN NEW YORK,INC.: WWW.DOWNTOWNNY.COM (2011)
FIGURE 14: NATIONAL SEPTEMBER 11 MEMORIAL: WWW.911MEMORIAL.ORG

15

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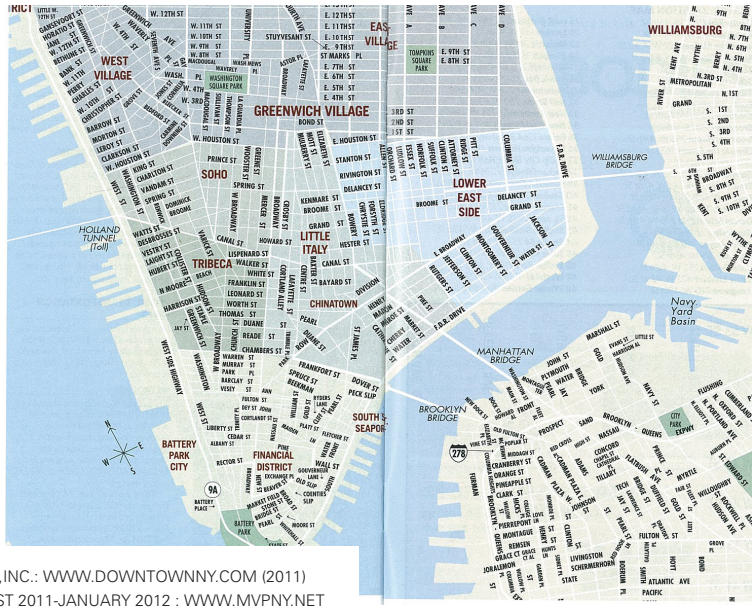


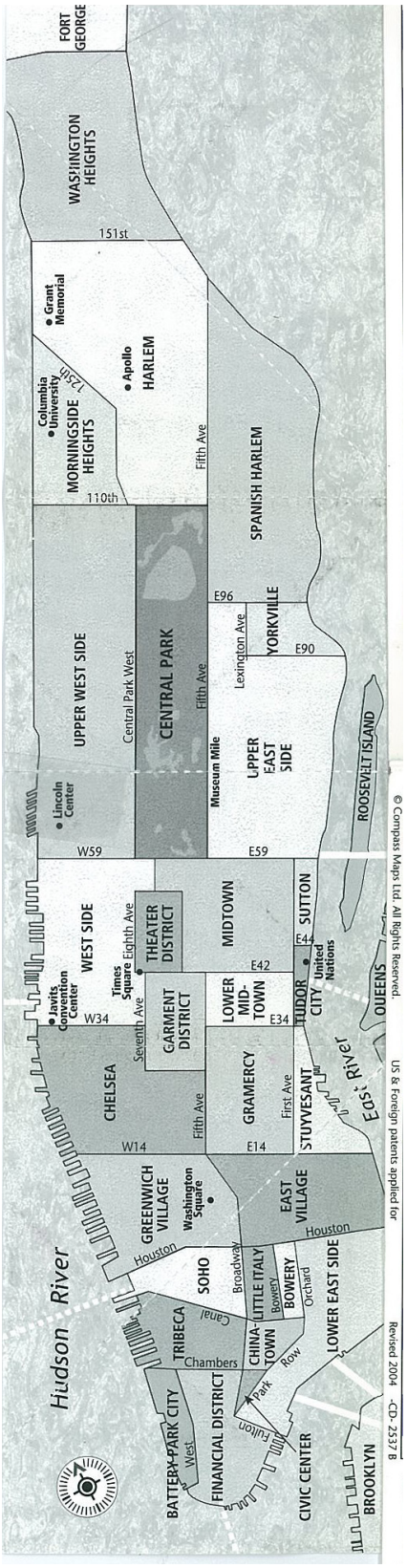
FIGURE 15: ALLIANCE FOR DOWNTOWN NEW YORK,INC.: WWW.DOWNTOWNNY.COM (2011)
FIGURE 16: NEW YORK CITY'S QUICK GUIDE : AUGUST 2011-JANUARY 2012 : WWW.MVPNY.NET

ing about encounters of desire and experience in an unknown terrain, which reveal spatial points or waypoints within a network of impulse and purpose.

conclusion

The movement of the user, as they traverse the Manhattan terrain, allows for many options, affording different perceptions of the urban landscape. If this is the case, what is the most ideal mode of transportation and movement from one destination to the next? In Manhattan, the user has many options to move and traverse the urban landscape of the city, while perceiving and interacting at various velocities depending on the particular mode of travel. Movement alters one's perception from one vector to another within the space of movement. Yet one finds time to experience the place in which they traverse and inhabit on a daily basis.

17



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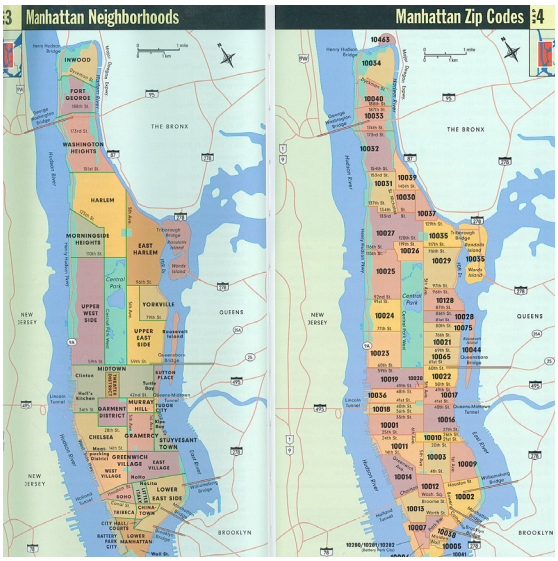

FIGURE 17: COMPASS MAPS LTD. (2004)
FIGURE 18: FLASHMAPS NEWYORK : WWW.FODORS.COM (2011)

B. ELEMENTS OF MANHATTAN

The elements that make up Manhattan's terrain can be understood as parts to a structural whole, which enables it to be read and understood by the city dweller. This reading of the urban context affords the user many ways of traversing, a movement that allows one along the way to discover and find what they are searching for, specific to the context one inhabits. These elements that Kevin Lynch has identified in a landmark book, *"Image of the City"* can be used to further understand how people traverse the terrain of Manhattan. If people are traversing the urban landscape, how are they finding what they looking for? How are people orienting themselves; is it from the architectural cues of the city or something else? For example, each element that helps to structure the city for the user to find their way, such as districts, nodes, edges, paths, and landmarks, informs the user's perception of place while they traverse the space and find their points of interest. **(figure 01)**

primordial cues of orientation

The references of orientation are seen in the inherent qualities of the terrain in which the user or city dweller traverses. These primordial cues are experienced in the topography of the land, such as, the mountains of the surrounding area as well as the sun path, which is a mobile point of reference used to navigate. For example, the terrain of Manhattan affords the user the ability to use the sun as a point of direction for orienting the user from east to west and north to south while moving along paths in urban the environment.

01

FIGURE 01: CIRCLE LINE SIGHTSEEING CRUISES: WWW.CIRCLELINE42.COM (2011)

The water edges of Manhattan give visual cues to where the user is on the terrain, and possibly a point of reference for further exploration, such as up or down, towards destinations along the coast. Also, the elevated fluctuations in the topography of Manhattan can give different perspectives that inform the users perception along the way, a trajec-

tory towards points of interest in the city. Perhaps most importantly, the primordial cues are inherent to site and are universal in most circumstances because they are governed by the cosmos of planetary movement and the orbit around the sun. The formations of the earths crust can create reference points of orientation for the user. This influences and informs the wayfinding experience, such as the manifestation of cognitive maps, a mental construct of ones urban domain.

landmarks as a wayfinding system

The landmarks of Manhattan serve as cues of orientation in the urban landscape. For example, the buildings, which are visible from Manhattan's skyline, give a sense of identity and visual representation for its travelers and inhabitants. They serve as icons for a city that has become a destination for many and a cultural sign of modernization and success. Manhattan's borough has the largest population of people, which makes it the densest of the five, so a legible wayfinding system is crucial. The city requires a system of finding your way through a landscape of landmarks, and reference points for finding destinations or points of interest. A user of the city has to set up an itinerary in order to find most destinations; through the use of maps. In figure 02, it illustrates the districts as anchors or signs in the urban terrain, which set up points of reference, and allows one to orient or mentally map the terrain. This illustration maps a walking trajectory with reference to points of desire. **(figure 02)**

02

FIGURE 02: CITY WALKS DECK: NEW YORK: MAPS: 2004 REINECK AND REINECK, SAN FRANCISCO

paths of traversing

The paths of Manhattan's terrain are accumulations of bodily and mechanical movements, that is, the pedestrian pathways, subway lines, streets, and bike lanes give the user different ways of traversing the landscape.**(figure 03, figure 04, figure 05)**

03

04

FIGURE 03: MANHATTAN MIDTOWN : DATUM MANHATTAN (2010)
FIGURE 04: WWW.TERRA MAPS.ORG (2011)

Of course, each circulatory path has its on velocity, which impacts the user's perception while moving through Manhattan's urban landscape. The 1811 grid that laid the foundation for a rational type of orientation and movement has influenced the users trajectory, towards places of interest, such as destinations, which the user has to traverse to find. An urban framework of intersecting pathways with verticals, horizontals, and diagonals in the street patterns gives the users many options on how to traverse. In **figure 06**, Broadway Avenue cuts through the grid diagonally to allow access to any point on the island.

regions and districts

The regions of Manhattan can be seen as parts that make up the city and within it's regions districts that give place and meaning to the urban space. These regions in **figure 07** are made up of larger sections of the city, such as, Lower Manhattan, The Villages, Midtown Manhattan, Upper West Side, Upper East Side, Central Park, The Heights and Harlem, and Upper Manhattan. Indeed, the regions can be divided up into districts, which are defined by edges that give it closure but that is debatable because they tend to overflow into other districts, so that makes their boundaries permeable to the users perception and bodily movement. A district can be seen as a having an identity, such as, Chinatown and Little Italy because they have a strong ethnic history, which gives it a sense of place within in the urban framework. Districts can be seen as having unique characteristics that distinguish it from other dis-

05

06

FIGURE 05: FLASHMAPS NEWYORK: WWW.FODORS.COM (2011)
FIGURE 06: FLASHMAPS NEWYORK: WWW.FODORS.COM (2011)

tricts. While traversing the interior one can observe this while experiencing the space. The exterior's edge of most districts is used as spatial cues for the user as well as points of reference in proximity to other places while traversing the urban landscape.

nodes of activity

Most of the nodes of Manhattan tend to occur where paths converge and where events take place. For example, **figure 08**, one nodal point in Manhattan's terrain is Times Square; it's a destination, where paths intersect and merge, and where information and people converge. This space allows for many events to take place there, such as outdoor concerts, and digital entertainment, which is embedded within its surrounding architecture as advertising. Yet another node of activity is seen at Union Square because it allows for paths of movement to converge, that is, pedestrian paths, exits, and entrances for underground subway lines. Union Square creates a habitable space for pedestrians and a farmers market on the weekdays, which becomes a destination and point of desire. Most nodes or cores of the city can be considered points along the way, which paths converge and where the user can enter, that is, a "intensive foci"[170] that the city is structured around, to inform and epitomize the urban landscape.[171] The city of Manhattan and its districts are structured in such a way, to afford these nodal places of activity to convey meaning, and symbolic representation in the space they inhabit.

07

FIGURE 07: STREETWISE MAPS INC. 2011

edges and borders

The edges of districts make up Manhattan's urban landscape, and give definition and "linear breaks" [172] or boundaries from the places in proximity. Most importantly, these boundaries can still be traversed and penetrated because they are perceptual as well as architectural in the context of each district internally and externally. In Man-

170 Kevin Lynch, *The Image Of The City* (Cambridge Mass.: Technology Press, 1960), 47.
171 bid., 47.

175 bid., 47.

hattan's terrain these edges can be found defining the districts and the shorelines because they both are boundaries, a break in the perception and movement of the user across specific areas of the city.

conclusion

The elements of Manhattan inform and orient the user so they can find their way, but every person perceives things differently, so, is it possible to have an urban system that lends itself to the wayfinding system as whole, and specific for every individual user? Each and every element of the city, such as the paths, nodes, regions, edges, and landmarks afford the user the ability to read the city, which Lynch explained, but these elements are part of a larger whole of comprehensibility for the dweller of the urban fabric. These elements communicate to each user differently over time. These urban parts fluctuate in meaning within a city's framework. Can these elements of the city hold to their original connotations or are they in a never-ending transition with the place and context with which they are embedded? These instances of place create: frames of reference, structures of orientation, and discoveries for the urban dweller.

08

FIGURE 08: MAP BY DAVID LINROTH INC.: NYC & COMPANY (MAY 2011)

C. SURVEYING TRAVELERS TO MANHATTAN

In this research project of Manhattan, I posed the question of how one wayfinds and what tools they use, if any. I gave out surveys to the tourists that asked specific questions; for example, what are the visual cues that help you orient yourself in Manhattan? Also, what landmarks do you use for referencing your position in the city? These questions may help to frame and understand how people traverse the spatial terrain of the city this can help explain wayfinding's function and method. Each person's perception of the urban framework is different and needs to be addressed to make informed decisions in spatial movement. This helps to inform them on where there point of interest or destination is in the city's context, and the path to traverse to get there. In **figure 01**, the pedestrian walkers traverse through a matrix of points that inform and give direction. These patterns have meaningful relationships with the contextual urban landscape that one encounters.

destination finding and encountering

The users of Manhattan used various methods of finding and encountering points of interest within the urban terrain. For instance, most of visitors to the city move through the streets on foot primarily because it affords them the most experiential way of viewing their surroundings. These same people even traveled on the subway for more immediate ways of moving from lower Manhattan to upper portion of the city, paying $2.25 per travel that was deposited in an underground tollbooth with a MTA metro card. **(figure 09, figure 10, figure 11)**

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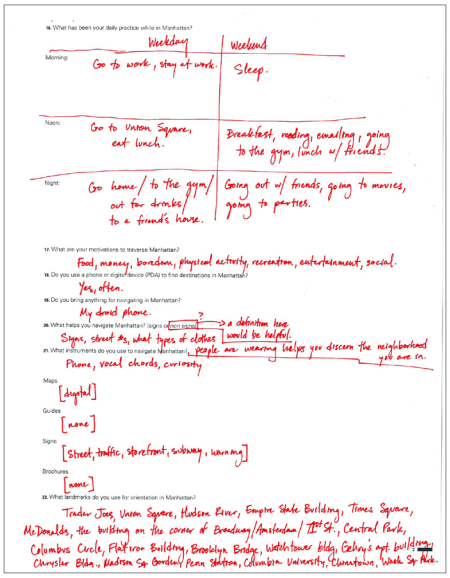
02



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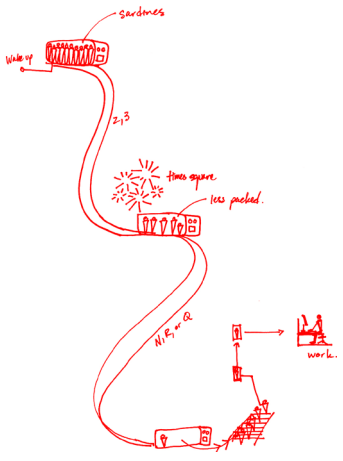
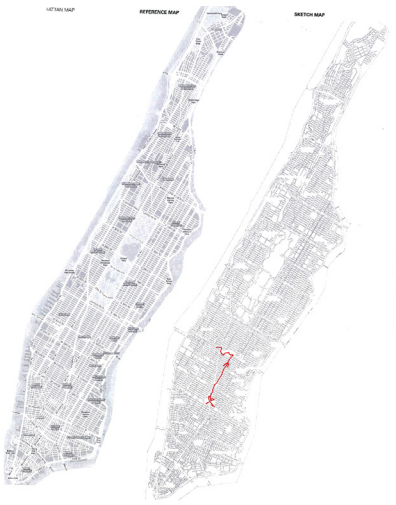


FIGURE 01: MANHATTAN IMAGE: 5TH AVENUE
FIGURE 02: SURVEY BY TRAVELER
FIGURE 03: MAPPING BY TRAVELER

03 a

04 a

03 b



04 b

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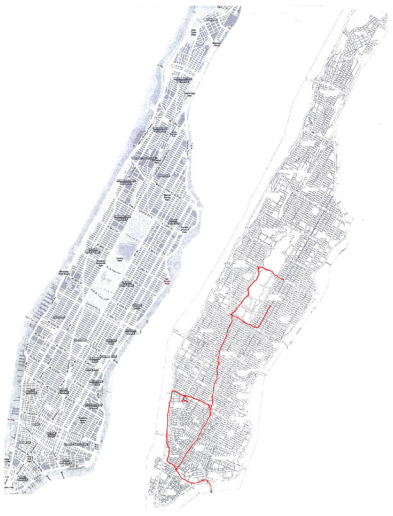
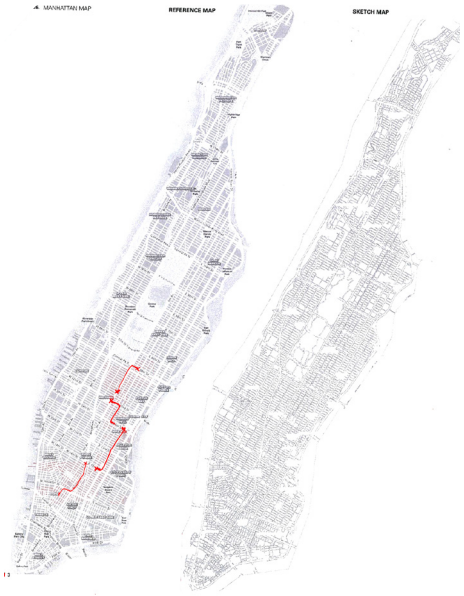


FIGURE 03a to 04c :
MANHATTAN MAP-
PINGS BY TRAVELERS

05



07

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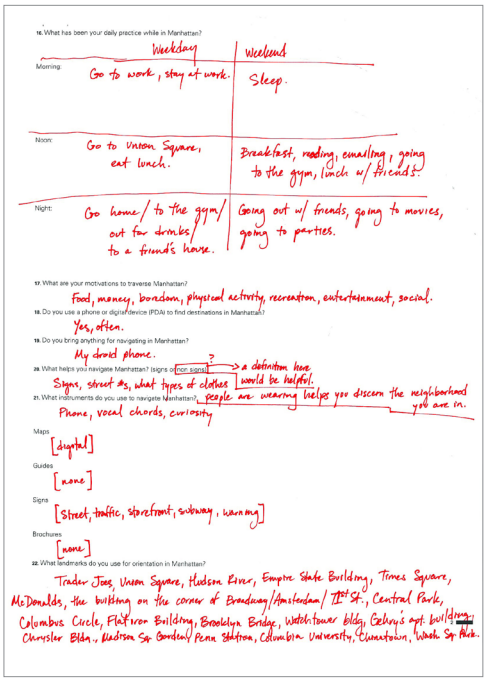

16. What has been your daily practice while in Manhattan?

	Weekday	Weekend
Morning:	Go to work, stay at work.	Sleep.
Noon:	Go to Union Square, eat lunch.	Breakfast, reading, emailing, going to the gym, lunch w/ friends.
Night:	Go home / to the gym / out for drinks / to a friend's house.	Going out w/ friends, going to movies, going to parties.

17. What are your motivations to traverse Manhattan?
Food, money, boredom, physical activity, recreation, entertainment, social.

18. Do you use a phone or digital device (PDA) to find destinations in Manhattan?
Yes, often.

19. Do you bring anything for navigating in Manhattan?
My droid phone.

20. What helps you navigate Manhattan? (signs or non-signs)
Signs, street #s, what types of clothes people are wearing helps you discern the neighborhood you are in.

21. What instruments do you use to navigate Manhattan?
Phone, vocal chords, curiosity

Maps
[digital]

Guides
[none]

Signs
[Street, traffic, storefront, subway, warning]

Brochures
[none]

22. What landmarks do you use for orientation in Manhattan?
Trader Joes, Union Square, Hudson River, Empire State Building, Times Square, McDonalds, the building on the corner of Broadway/Amsterdam/ 110th St., Central Park, Columbus Circle, Flatiron Building, Brooklyn Bridge, Watchtower bldg, Gehry's apt. building, Chrysler Bldg., Madison Sq Garden/ Penn Station, Columbia University, Chinatown, Wash. Sq. Park.

08

FIGURE 05 to 08 : MANHATTAN SURVEYS AND MAPPINGS BY TRAVELERS

When one finds their way out of the subway to the surface, one can encounter different points of the city. Unexpectedly, I traveled on the subway and when I reemerged, I encountered different signs and people from the last place I was occupying, such that, the places and people tended to merge with their immediate surroundings. They communicated their sense of space and place through their gestures and movements.

signs and nonsigns of movement

The people I surveyed had certain things in common; some used street signs (the street numbers) to orient themselves with the avenues in Manhattan. Of course this is in response to "The Commissioners Plan of 1811" [173], which proposed the division of the city into a precise grid formation that is composed of 12 avenues width and 155 streets in length, overlaid on the city's terrain.[174] Because of the grid's formation on the landscape of Manhattan, the users of the city could orient themselves by using avenues and streets to find their way to destinations throughout urban terrain.

The spatial movements of the users tend to be from north to south on avenues and east to west on streets, but I have found through surveying the users that they move diagonally as well as vertically and horizontally.**(figure 12, figure 13, figure 15)** This diagonal traversing affords the user, a short cut, which is played out in a series of

09

10

11

FIGURE 09: MANHATTAN IMAGE: SUBWAY SIGN
FIGURE 10: MANHATTAN IMAGE: SUBWAY TRAIN WINDOW SIGN
FIGURE 11: METRO CARD: (MANHATTAN TRANSPORTATION AUTHORITY)

176 Phoebe Adler, Phoebe, Tom Howells, and Duncan McCorquodale, *Mapping New York* (London: Black Dog Pub, 2009), 14.
177 Phoebe Adler, Tom Howells, and Duncan McCorquodale. *Mapping New York* (London: Black Dog Pub, 2009), 14.

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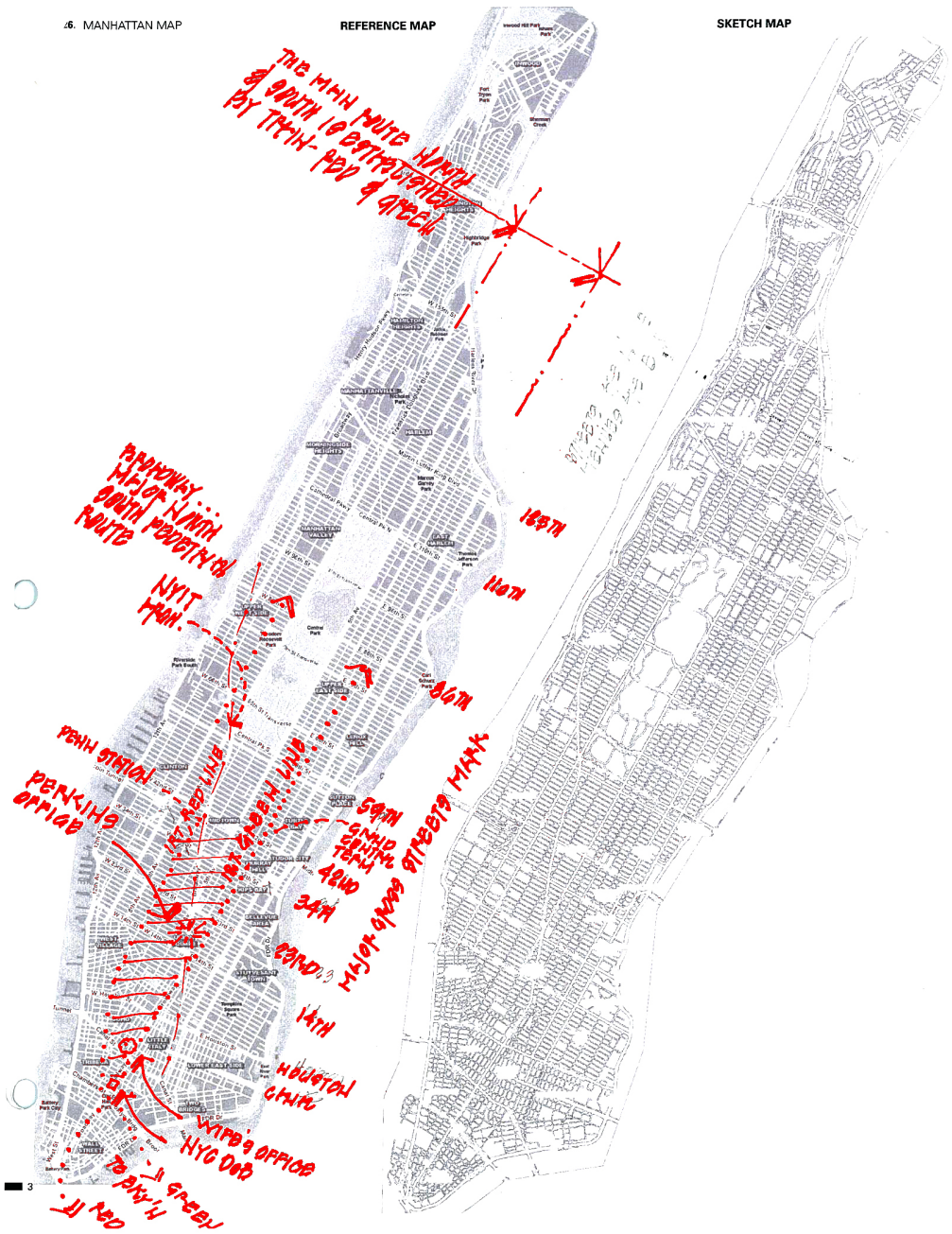

FIGURE 12: MANHATTAN MAPPINGS BY TRAVELERS (TRAJECTORIES OF MOVEMENT TOWARDS POINTS OF DESIRE)

13

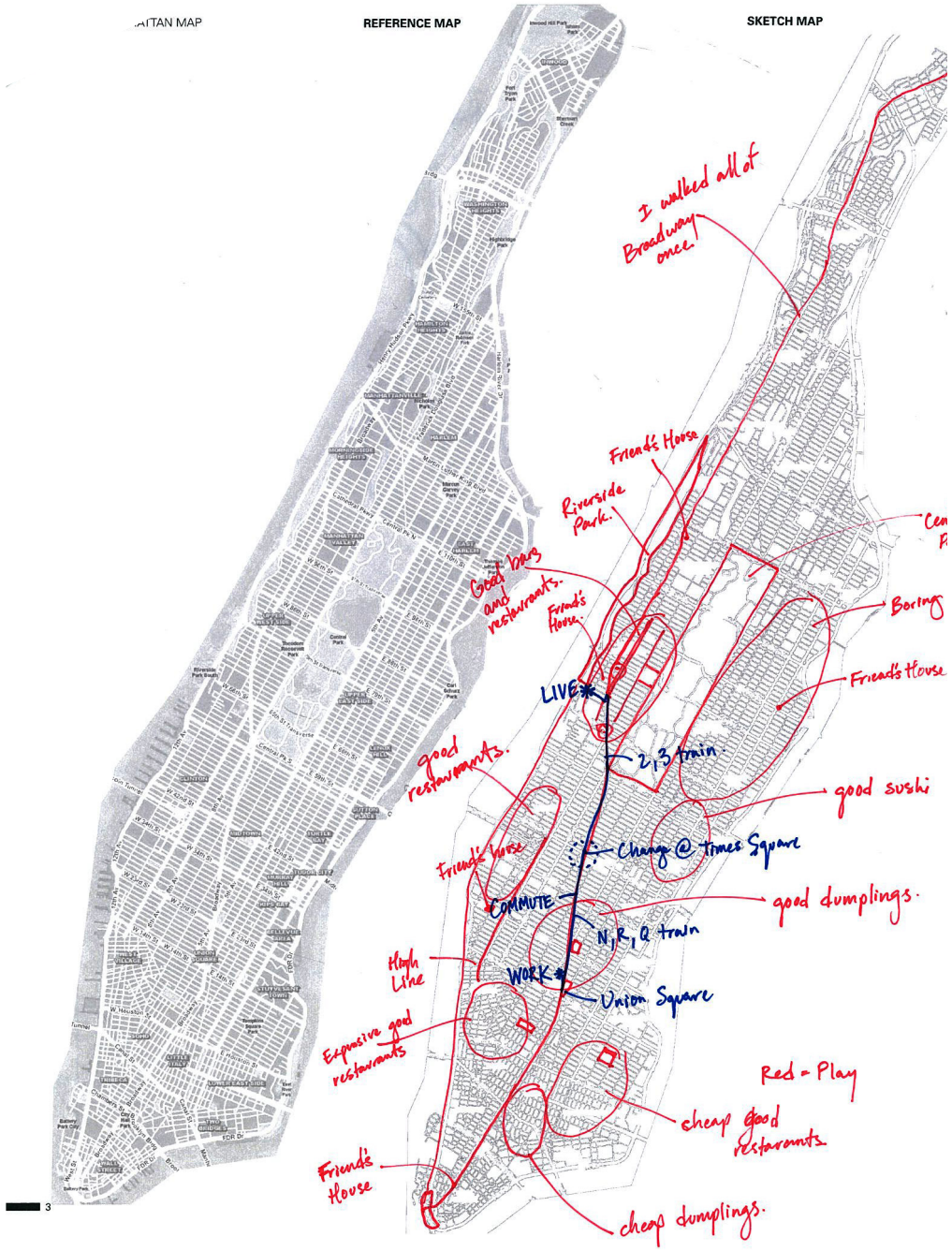

FIGURE 13: MANHATTAN MAPPINGS BY TRAVELERS (POINTS OF DESTINATION AND DESIRE)

movements on Broadway Avenue, thus, creating a series of moments along the way, a diagonal intrusion of trajectory and transition across the Manhattan's grid to multiple points of interest. This movement accompanies signs **(figure 14)** and non-signs, but only at specific junctions, corridors, and intersections along a trajectory.

instruments of wayfinding

In the urban environment of the city, for instance, most users in Manhattan use handheld devices to find their way, such as iPhones and PDA's devices that use GPS (Global Positioning System), which enables them to pin point their location and find any point of interest with precision. However, I have found when depending on technology to find points of desire and destination, one can become lost and encounter an unexpected place. Nevertheless, most of the travelers I surveyed where using their smart phones to find places and destinations in the city, while others were using printed maps and subway maps to traverse the urban terrain. Some of the participants printed out maps from the Internet before leaving their origin or locus point, to anticipate their spatial point of desire. Most individuals plan and organize the shortest routes before traversing the labyrinth of Manhattan.

Manhattan as destination

Manhattan is a destination for many who visit because of its landmarks, districts, parks, and paths. These spatial points of interest have become perpetuated through multiple channels

14

15

FIGURE 14: MANHATTAN IMAGE: 19TH STREET
FIGURE 15: MAPPING BY TRAVELER

of communication and media. These landmarks of the city, such as, the Empire State Building, Chrysler Building, Statue of Liberty, and others create an image of Manhattan through postcards **(figure16)** and other ephemeral print. The structure and meaning of the city's elements allow for this communication to take place. Moreover, destinations are spatial points within a network, which the visitor experiences and discovers. These cognitive meanings are multiple and shifting to the terrain one traverses. Yet they are different from other places in proximity, giving them unique characteristics that the visitor perceives and identifies.[175]

16

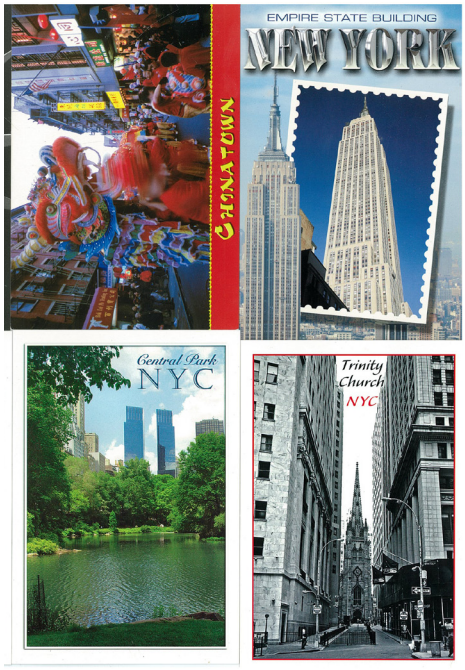

FIGURE 16: MANHATTAN POSTCARDS, INC. NEW YORK, NY 10009

conclusion

All the travelers I surveyed, a very small sample of the population, favored the mode of traversing on foot opposed to other mechanical means such as bus, train, or automobile. They enjoyed walking and traversing the landscape of Manhattan. Sometimes they had specific destinations and at other times they just wandered for pure enjoyment. They discover and encounter things along the way, which reveal experiential points of space. Perhaps most importantly, the visitors to Manhattan were finding and discovering moments of impression within the urban terrain, which allow one to orient and perceive their surroundings for an intimate connection of desire.

175 Kevin Lynch, *The Image Of The City* (Cambridge Mass.: Technology Press, 1960), 47.

D. INTERPRETING MANHATTAN'S TERRAIN

In these interpretive mappings, I will attempt to analyze specific features of Manhattan's terrain to understand how the visitor or resident traverses the city. So, how does the user of the urban framework find their point of destination and desire, which is meaningful and has purpose? Does image making in the sense of environmental perception give cues for traversing and finding one's way through the urban terrain? If so, then maybe it can be mapped to better articulate the city's structure and meaningful relationship to the contextual fabric of movement while traversing to multiple points of interest. The image of Manhattan plays a crucial role in identifying its meaning and structure from other cities. Its identity gives the visitor a sense of destination and of inhabitable space with experiential moments that can create meaningful memories.

Manhattan as image

The image of Manhattan can be deconstructed into different parts, a representation of signifiers, which amount to a totalizing view as seen by the user. Perceiving an image of the urban environment, through an identification of parts, its identity, structure, and meaning, brings to the participant a sense of familiarity, depending on their perception of the visual cues.[176] Most environmental images need specific parts to enable a representation to trigger in the mind of the beholder; for example, Manhattan districts enable specific features to become embedded in the users perception that can be architectural or part of a "space syntax" [177]. An identity of urban life in that specific locale can become a feature that responds to the image and reinforces its production in its participants or viewers. In **figure 01**, the postcards communicate a specific destination through its architecture, which becomes landmarks to further its identity of site. These symbolic landmarks become a communication device and a trigger for finding spatial points in the urban landscape.

01

FIGURE 01: MANHATTAN POSTCARDS, INC.
NEW YORK, NY 10009

loading and dispersing

People load into automobiles, trains, subways, and ferries to get to their destination. Upon arriving at the desirable location, they disperse. This circulation of

179 Kevin Lynch, *The Image Of The City* (Cambridge Mass.: Technology Press, 1960), 47.

177 Andrea Gleiniger, And Markus Christen. *Pattern Ornament, Structure And Behavior* (Basel: Birkhäuser, 2009), 63.

mass transit is a crucial aspect to how users of the city navigate and find their way. They traverse large distances on these modes of movement that they use quite frequently because it affords them the means to get there by the least amount of energy; it's economical and useful. When they arrive at their destination they disperse in a rhythm that is seen as chaotic but flows in movement and direction. The urban framework tends to permit and anticipate the movement of the traveler. This transitioning of place is an altering of perception and time, a flux in trajectory that is inconsistent with the user's percept of space, a realization only at the final point of arrival.

In **figure 02**, the points of arrival and departure are from different modes of movement such as boats, automobiles, and trains. These points of access and departure can be mapped and seen to give the users to Manhattan options on reaching their destination and point of interest. For instance, in **figure 03**, Union Square serves as an active nodal place to encounter and disperse out from the subway, which is in close proximity.

As in **figure 04**, the grid is not as rigid as one may anticipate, but a system that allows for diagonals of streets to penetrate it, the primary diagonal path is Broadway Avenue that cuts across the city's terrain. These pedestrians flow through the streets and disperse to their destinations or points of desire from this diagonal pathway.

02

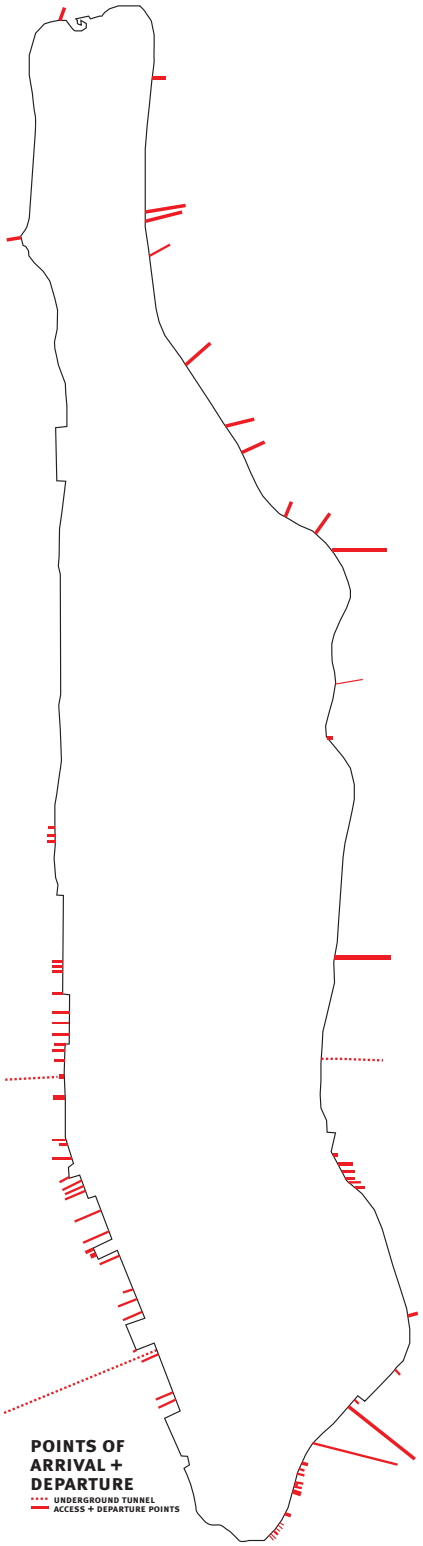

FIGURE 02: INTERPRETATIVE: MANHATTAN'S POINTS OF ARRIVAL AND DEPARTURE

familiar and unfamiliar terrain

The familiar terrain of Manhattan tends to become interesting when compared to the spaces that are not well known in the urban framework. These same spaces can become linked to the overall plan of the city, which is a network of open spaces and green spaces where people can take refuge and become participants in the landscape of imaging the city, if strategically positioned. For example, in response to Zuccotti Park, the activists were in proximity to a financial hub of Wall Street, which created a space of occupation and triggered an image in the perception of the users in and outside the space. In **figures 05 and 06**, it entails seeing relationships in open spaces or parks that organize and create nodal points. Within these boundaries and on their

03

04

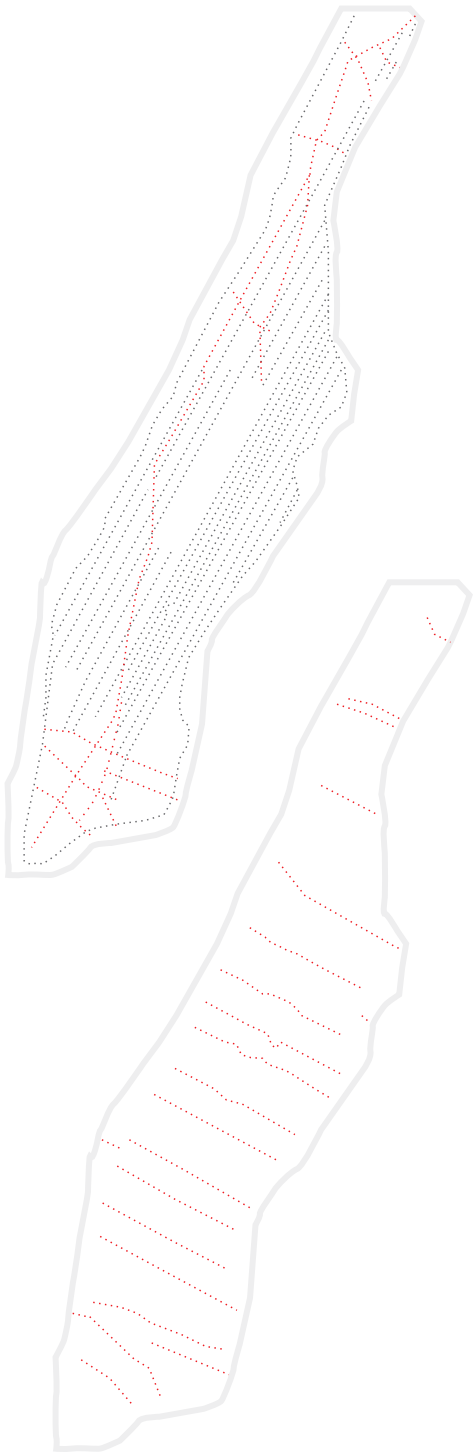

FIGURE 03: MANHATTAN IMAGE: UNION SQUARE
FIGURE 04: INTERPRETATIVE: MANHATTAN'S DIAGONAL AND HORIZONTAL STREETS

edges, the inhabitants are occupying the space. Zuccotti Park is a small public green space, comparing it to other similar spaces in Manhattan. Its proximity to Wall Street was a factor that catapulted it onto the global stage when the protesters (99%) occupied it.

Manhattan's fluctuating terrain

The fluctuations in the terrain of Manhattan are manifestations of spatial grid of streets and avenues, which frame the space allowing movement and habitation to take root, thrive. This system of horizontal and vertical paths affords an open-ended structure to the city that never sleeps, adaptability to change; for example, the grid at each end is rotated and fluctuates to the rhythm of the proposed plan of 1811. In **figure 07**, there is a fluctuation of pathways and

05

06

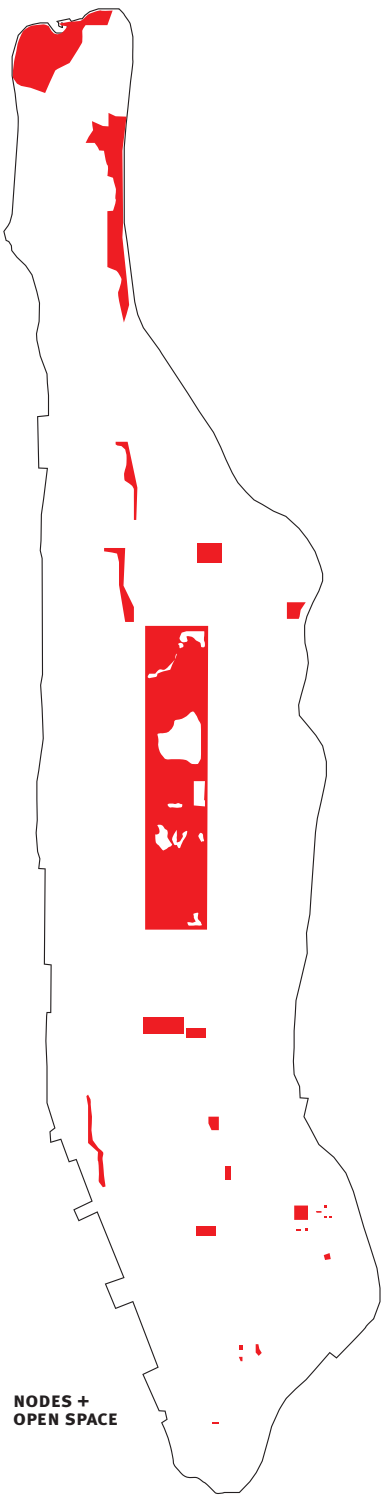

FIGURE 05: MANHATTAN IMAGE: ZUCCOTTI PARK
FIGURE 06: INTERPRETATIVE: MANHATTAN'S NODES AND OPEN SPACES

movement. It varies from one to five in complexity and fluctuation, which is a variation from the grid that was imposed upon the terrain. The differences of layout are created from predetermining a site or top down approach or letting it take on a character of its own, an organic procedure from the bottom up.

conclusion

The interpretive mappings of Manhattan can give insight into a structure that is viewed as a perpetuation of rationalism, an offering of fluctuation and adaptability to change. These interpretive mappings can become part of a larger dialogue with the participants in the spaces, which allow for their movement and trajectories toward points of interest. The users are becoming more attuned with their surroundings through the use of perceptual cues in the urban landscape, but each user has their own unique ability to frame the space they inhabit differently. To imagine a place where the user can identify, create meaning, and connect to their surroundings through all the abilities that being human afford, that is, a place that endures a sense insight and growth for the human dynamic.

07

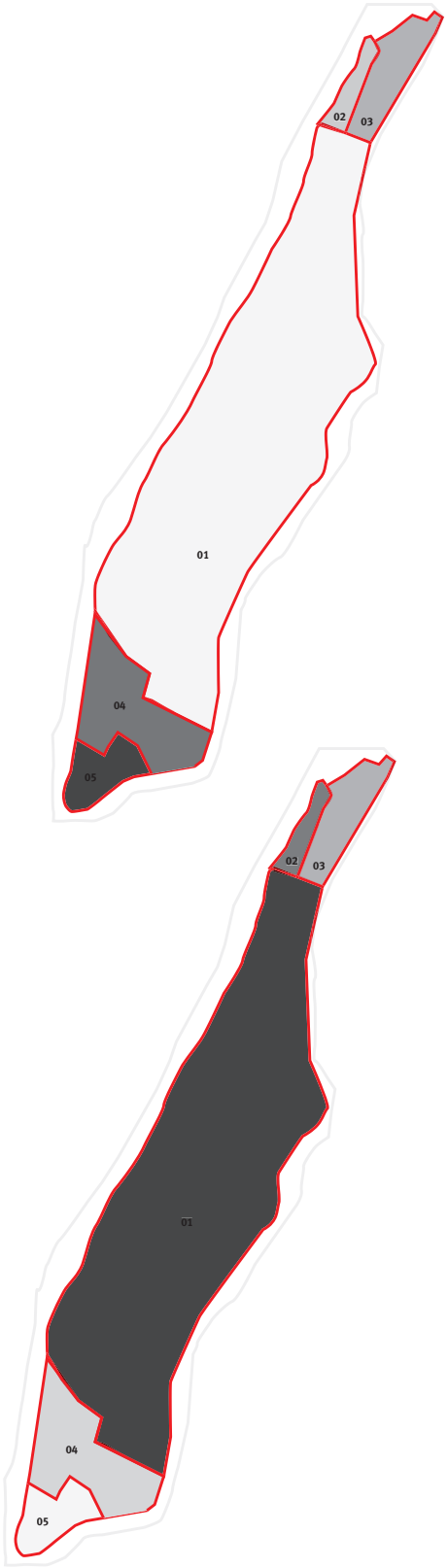

FIGURE 07: INTERPRETATIVE: MANHATTAN'S GRID FLUCTUATION

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CHAPTER 01:
WHAT IS WAYFINDING?

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CHAPTER 02 :
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CHAPTER 06 :
INTERPRETIVE AND EXPERIENTIAL MAPPINGS OF WAIKĪKĪ

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